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OVERSIGHT HEARING ON THE REAUTHORIZATION OF THE HIGHER EDUCATION ACT OF 1965

HEARING

BEFORE THE

SUBCOMMITTEE ON POSTSECONDARY EDUCATION

OF THE

COMMITTEE ON EDUCATION AND LABOR
HOUSE OF REPRESENTATIVES

NINETY-NINTH CONGRESS

FIRST SESSION

HEARING HELD IN LOWELL, MA, JULY 29, 1985

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OVERSIGHT HEARING ON THE REAUTHORIZATION OF THE HIGHER EDUCATION ACT OF 1965

MONDAY, JULY 29, 1985

House of Representatives,
Subcommittee on Postsecondary Education,
Committee on Education and Labor,
Lowell, MA.

The subcommittee met, pursuant to notice, at 9:44 a.m., trustees' room, O'Leary Library, Lowell, MA Hon. William Ford presiding.

Members present: Representatives Ford, Atkins, and Hayes.

Staff present: Thomas R. Wolamin, staff director; Kristin Gilbert, clerk; Rose DiNapoli; Republican legislative associate.

Mr. Ford. I am pleased to call to order this hearing of the Subcommittee on Postsecondary Education of the House of Representatives. This is the 10th of a series of 11 field hearings that we have scheduled around the country. I would say at the outset, the reason that we are here aside from the fact that I always liked an excuse to come to Massachusetts is because a new member of our committee, Chet Atkins, started insisting from his first day on the committee that we were not going to write up a bill until we came up here to hear from people that he wanted us to hear from.

We have been in Vermont, Illinois, Iowa, Michigan, New York, Missouri, twice in Pennsylvania, in Pennsylvania you have to do one in the east end of the State and one in the west end of the State because they do not talk to each other very often even at the college level and last week in the State of Washington. After today, we have one scheduled in Maine and the balance of the hearings will be held in Washington. We scheduled 20 hearings that are subject matter specific in Washington and we have now completed 13 of the 20. We will go back at that tomorrow morning and we hope to have those completed sometime in September. To this point there are over 75 hours of record compiled on reauthorization since we started the formal process of reauthorization as distinguished from quibbling over the budget. We are hopeful that we will be putting a bill together after the Labor Day recess. I will be convening a group of organizations representing higher education this week in Washington as I did 5 years ago telling them it is time to quit dancing and posturing and it is time now to get some consensus from their perspective because if they cannot get together, they cannot very well expect that the Congress which is certainly more fractious then we have ever had to deal with before in reauthorization will be able to do it for them.

The Higher Education Act through grants, loans, and work opportunities is the principal source of Federal assistance for students going to school and this year we will make available in excess of $13 billion on behalf of students. Some 6 million students in 6,000 institutions will qualify this year for student aid, roughly one-half of all of the students who will be in colleges and other schools beyond high school during the coming year.

The Higher Education Act also contains programs to assist college libraries, a provision that Frank Mills is intimately acquainted with, international education and cooperative education as well as the Fund for the Improvement of Postsecondary Education.

Let me say at the outset that even though we have set up this very ambitious schedule of 33 hearings, there are far more people around the country who would like to be on the panel than we are able to accommodate. However, if there is anyone here who is not on a panel today who wishes to have their thoughts incorporated in the record we are preparing in anticipation of reauthorization, please feel free to forward them through Mr. Atkins. They will be included in the record contemporaneously with the comments that we take from witnesses today and that includes any comment you might wish to make about what you hear from the people on the panel. We do not want to turn away anybody's thought that might be helpful at some stage in this long process.

And with that I would first like to recognize the gentleman from Massachusetts, Mr. Atkins.

Mr. ATKINS. Thank you, Mr. Chairman. I would like to give a special thanks to Congressman Hayes from Chicago who has traveled to be with us this morning who is, like myself, a junior member of the committee. I also want to thank our chairman, Chairman Ford, who tells me this morning that next to northern Michigan this is the place he would most like to be in the country. He further stated that, because Cape Cod was his favorite place, God should have located it in northern Michigan. I am not sure I agree with him on that, but I certainly do in terms of most of his approach to higher education.

I think it is particularly appropriate that we have this hearing at the University of Lowell. If ever there were a city in this country that really is a testament to higher education and the dividends that our public investment in higher education has paid, it is here in Lowell. We see this process at work at Wang Laboratories and the incredible genius of Dr. Wang, which was nurtured on a scholarship in graduate engineering education at Harvard. And we see these returns among the literally hundreds of other high-tech entrepreneurs who have started operations in the city's old mill space. This process, heavily dependent on education, has really turned around both the attitude and the economy of Lowell.

And, as we look to the next generation of our growth in the city, under the leadership of Paul Tsongas, it is very clear that there are two focal points: First, how do we nurture elementary and secondary education systems so that we can continue to keep and attract a growing middle class to the city? Second, can we nurture and build the University of Lowell so that it continues to be the engine for the economic growth of the Merrimack Valley?

One of the things, Mr. Chairman, that I think would be of interest to you is that, more than any other public institution, and certainly more than any engineering school in the country, the University of Lowell in the last 4 years has made tremendous strides toward becoming one of the truly great engineering schools and technical universities in the country. A large part of this progress is the generous support that the university has had from Federal and State governments over the years. It is particularly a product of the foresight of State senator here, State Senator Paul Sheehey, who brought about the marriage of a teachers college and an engineering school with a historical background primarily in the textile industry. The marriage produced a great university that is now coming into international prominence, and it is this kind of partnership between public sector and private sector that has been so important here in Lowell. So we thank you for coming, and for recognizing the importance of the University of Lowell. We thank you for coming, and permit me to call on our first panel, Mr. Klemmer from Sky Computers and Dr. Hogan.

Mr. Ford. If you would like to come forward. Charlie, would you like to make any comment before we start?

Mr. Hayes. Just a comment and, Mr. Chairman, thank you very much and I am going to forego any opening statement. I would like to cite two reasons and list them as to their importance for my not giving any statement this morning: One is because I have gone over the list of impressive witnesses slated to appear before us, and it is easy to see based on their titles that responsibilities are such that time is too important to them. And the second reason, I was a benefactor last night of some of Boston's seafood hospitality; hence I am a little bit sluggish this morning.

[Prepared statement of William T. Hogan follows:]

Prepared Statement of William T. Hogan, President, University of Lowell, MA

I wish to thank the Subcommittee on Post-Secondary Education for coming to Lowell MA to hold one of their hearings and for inviting me to speak on the reauthorization of the Higher Education Act.

Let me begin my remarks by noting the substantial difference between the needs of public and private higher education institutions. Dr. Silber and Dr. Ryder will, I am sure, eloquently address the question of debt burden and the needs of the students attending private higher education colleges and universities. I thought it would be hopeful to you if I spoke about the experience of a young growing public institution located in a region of the country that has undergone a dramatic improvement in its economy and has done so by building an industrial segment which is driven by talented human resources.

Lowell—the location of the first powered textile looms in America, the heart of the American industrial revolution—prospered economically when our industries were on the cutting edge of a new technology and, lacking any substantial resources other than human talent, suffered bitterly whenever we fell behind the leading edge of current technology. In the 1940's, 1950's, 1960's, and into the 1970's, we suffered from chronically high unemployment in the 10 to 20 percent range. By the early 1970's, it was clear that northeastern Massachusetts was gaining a prominent position on a new industrial cutting edge—electronics, computers, and related products. In 1975, this university was created by merging what had been two specialized institutions—one routed in textiles and one routed in teacher preparation. The central focus of the new university's mission was to assist in regional economic development. To fulfill this mission, we designed a three-phase development strategy. The first phase was to build a sizable undergraduate base to deliver high quality undergraduate programs and to ensure the quality by pursuing regional and national accreditation for every program for which such accreditation exists.

The second phase was to establish a much smaller but very carefully targeted set of graduate programs designed to create and foster leadership in the two areas that we believe are critical to the regions economic well-being, namely: (1) The disciplines that have a direct impact on the type of industrial base that is flourishing in Massachusetts—engineers, computer, scientists and managers; and (2) the two professional areas that we believe are the most sensitive to maintaining a competitive work force in the long term, education (initial teacher preparation and renewal), and health delivery services. The third and final phase was the establishment of a limited number of major teaching/research/development centers designed to keep our programs current and to integrate those programs in a much closer way with industry, the K-12 public school systems and the health services organization than has been done in the past. This University is now just 10 years old, the full-time student enrollment has grown from about 5,000 to about 10,000, the part-time enrollment from about 2,500 to about 6,500. 20 of the 22 accreditation quality checks have been achieved. We have established graduate programs through the doctoral level in electrical engineering, mechanical engineering, plastics engineering, computer science, and are preparing to initiate one in education. Two of the major centers have been created—one focused on productivity enhancement and advanced materials, and the other on field studies of K-12 public school systems. Our graduates are sought after, we now have the highest admission profile in the public sector in Massachusetts—in short, the three-phase strategy for assisting in economic development is in place and the early signs are very hopeful. Whether or not this direct attempt of using an educational institution to leverage regional economic development by educating both a base supply and attempting to educate a inner thread of future leadership will succeed—only time will tell, but we are already 10 years into the test and the external judgements appear to be favorable—I might add in an area where educational standards are high and professional competition keen.

Unlike the overriding problem of student debt burden that I see the private higher education segment confronting, to the very best of our knowledge and ability to measure the overriding problem here at Lowell is not the debt burden of our students, but rather the need to maintain the quality of the educational infrastructure, for without high quality programs our graduates will not be prepared to compete in what has truly become global competition. By educational infrastructure, I mean the quality of our research laboratories and our libraries, the ability to education and development of future faculty and the ability to develop test and evaluate closer linkages between higher education and the practicing professional—who in our case are the engineers, scientists, and managers in industry, the teachers in the public school systems and the deliverers of health services. These linkages are being sought for two reasons. First, as a means of enhancing the education of our undergraduate and graduate students by paralleling classroom and academic laboratories with real world/real time problems and situations. Secondly, they are being sought as a way to assure that our practicing professionals and faculty both remain current, aware of new and emerging technologies.

Let me elaborate what can be done and gained by improving this educational infrastructure by forging partnerships between industry, government, and academia.

First, from our experience at Lowell, let me point out that it simply would not have been possible to move to the quantity and quality level of education that we are now at without the donations of scientific and engineering equipment encouraged by the present tax credit incentives. Lowell has received, on average $250,000 a month for the past 44 months primarily from Massachusetts high technology firms. In some areas, such as computer-aided engineering design, these donations have made it possible for Lowell to go from no facilities at all to what outside nationally recognized engineers have described as the best collection of such equipment that they have seen. We could not have purchased this equipment with our level of State support. In other areas, where the present tax credits do not exist, our equipment is inadequate and is a serious continuing impediment to our pursuit of quality education. The same concern applies to the libraries, especially to the scientific and technical research libraries, where change is occurring very rapidly. Tax incentives for equipment donations have been of great value to us and I encourage continuation and expansion of the concept and consideration of direct grants for libraries.

Finally, let me talk about time as a way in which partnerships can help. I want to talk about the students time, the faculties time and the practicing professionals time. Most of our full-time undergraduate students work to help offset the cost of their education. About 50 percent of them work between 15 and 20 hours a week during the academic year. We are planning to initiate an internship program as a component of our educational offerings. In this program young, and not so young, people who wish to matriculate here at the university would be offered the opportunity of this internship track.

The program will be administered in collaboration with a network of business and industrial organization in all parts of Massachusetts. Participating students will supplement classroom learning with invaluable experiences in a practical learning environment and earn a significant part of their collegiate expenses at the same time. Students will be able to work 15 to 20 hours per week when classes are in session and 40 hours per week when they are not. Not only does this offer students another desirable way of completing their degree, but it also provides them with the experiences of an invaluable learning laboratory. Area industry is also served because it improves the flow of needed manpower to staff their growing needs.

Funds to assist in the startup of such internship programs would greatly assist Lowell and I suspect other institutions addressing the same issue.

The time of area practicing professionals and the time of our faculty is a limited commodity. Effective ways need to be established to share the time of these two groups if indeed we are to affect a close enough linkage between practitioners and faculty to assure the long-term vitality of each and to maintain a vigorous cross fertilization that will raise the level of interest and commitment of our students to their chosen profession.

Our center for productivity enhancement and advanced materials, our center for educational field studies, and indeed our new engineering and science doctoral programs (which are innovative "practioner degree"), all require a mixing and sharing of time of our faculty and practicing professionals. It would seem to me that it should be possible to greatly facilitate this mixing and sharing in a way paralleling the way in which tax credits introducted in the early 1980's have facilitated the donation of scientific and engineering equipment to educational institutions.

Let me summarize by saying that from our experience at deliberately attempting to make use of a public university to leverage regional economic development the overriding problem is not the student financial burden—at least not at this point with available grants, loans, tuition waivers from the State and work study programs all in place. The pressing problems are to maintain quality libraries, and laboratories, to enhance the quality and depth of the educational experiences by providing professional internships, and to find effective ways for practicing professionals, faculty and students to interact so as to help the faculty and professionals to remain current and to help raise the level of interest and commitment of the students, to help shorten the time between the formation of an idea or concept and its development into a product or part of a delivery system. I think Congress can assist the development of the desired partnerships by continuing and expanding equipment donation tax credits, by establishing direct grants (perhaps with a matching feature) for library development, by providing funds for initiation and start up of industrial internships or "parallel cooperative education", and by developing incentives to facilitate the mixing and sharing of practicing professionals and faculty.

Mr. Ford. Mr. Hogan.

STATEMENT OF DR. WILLIAM HOGAN, PRESIDENT, UNIVERSITY OF LOWELL

Dr. Hogan. Thank you very much, Mr. Chairman and welcome to Lowell. I wish to thank the Subcommittee on Postsecondary Education for coming to Lowell to hold one of their meetings and for inviting me to speak here this morning.

Let me begin my remarks by noting the substantial difference between the needs of public and private higher educational institutions. Dr. Silber and Dr. Ryder I am sure will speak eloquently about the needs in the private sector and in particular about the question of debt burden on the students. I thought it would be helpful for you as a subcommittee to hear very briefly and first hand some comments on our experience in an attempt to use a public institution of higher education deliberately to enhance the regions economy and so I would like to share with you our strategy, what we think the outcome has been to date and what we think the problems are.

This experience has been the building of an institution in a region of the country that has undergone dramatic improvement in its economy and to have done so in a location that has very few resources other then human talent. Lowell, the location of the first powered textile looms in America, the heart of the American industrial revolution prospered economically when our industries were on the cutting edge of a new technology and suffered bitterly when we fell away from that cutting edge.

In the 1940's and the 1950's and 1960's and even into the 1970's, this area suffered from chronic high unemployment in the 10- to 20-percent range. By the early 1970's, it was clear that northeastern Massachusetts was beginning to assume a prominent position on a national scale in a new industrial cutting edge, one of electronics, computers and related products.

In 1975, this university was created by merging two specialized institutions, one routed in textiles, one routed in teacher preparation in an deliberate attempt to see if a broader based publicly supportive higher educational institution could impact the regions economy. We developed a three phase strategy for carrying out that mission; the first was to develop a fairly broad based set of undergraduate programs designed to deliver quality undergraduate education to some 10,000 students. The second phase was to establish a much smaller but carefully targeted set of graduate programs designed to create and force to leadership in the two areas that we believe are critical to the regions economic well being, namely the disciplines that have a direct impact on the type of industrial base that flourishes here in Massachusetts, computer science, science, management and two, in the two professional areas that we believe are the most sensitive to maintaining a professional competitive work force in the long term, namely teacher preparation, and the delivery of health services.

The third and final phase of our strategy was to establish the limited number of teaching and research centers designed to keep our programs current and to integrate those programs in a much closer way with industry, with the public school system K through 12 and with those organizations that deliver health services.

In the 10 years that we have been in existence we have grown from 5,000 to 10,000 students full time, from a few thousand part-time students to 6,000 to 7,000 part-time students; 20 of the 22 quality check points that we have put in namely national and regional accreditations have been achieved. We have established graduate programs through the doctoral level in electrical engineering, mechanical engineering, plastics engineering, computer science and are preparing to launch one in education. Two of the major centers are in place, the first one for productivity enhancement, advanced materials in the industrial scene and the second a center for field studies of our public K through 12 school systems. Our graduates are sought after, we have high admission standards; in short, the three phase strategy for economic development is in place, the early signs are very hopeful, the external judgments are very encouraging. Whether or not this deliberate attempt to use a public institution to leverage economic development will succeed in the long term only time will tell but we think we are off to a good start and we are 10 years into it.

Unlike the overriding problem of student debt burden that I see the private higher educational sector faced with, to the very best of our knowledge and to the very best of our ability to make this difficult measurement, it would appear that in our 10-year experience it is not—the overriding problem is not the debt burden on our students but rather the need to maintain the quality of our educational infrastructure. For without quality programs, our students will simply not be competitive in an industrial world that has indeed become global in terms of its competition.

By educational infrastructure I mean the quality of our research laboratories, the quality of our libraries, the ability to educate and develop future faculty, the ability to develop and test and evaluate closer linkages between higher education and practicing professionals who in our case are the engineers and the scientists and the managers in industry, the teachers in the public K through 12 school systems and those people who deliver health services. These linkages are being sought for two reasons. First, as a means of enhancing the education of our undergraduate and graduate students by paralleling classroom and academic laboratories with real world, real time problems and situations. Second, they are being sought as a way to assure that our practicing professionals and faculty both remain current, aware of new and emerging technologies.

Let me elaborate just for 1 minute what I think can be done and what can be gained by improving this educational infrastructure by forging partnerships between industry, Government and the academic world. First from our experience at Lowell, let me point out that it would simply not have been possibly to reach the quality and quantity level of education that we are at today had it not been in addition to the States support and Federal support, the very generous support of the private sector driven and encouraged through the tax incentives of the early 1980's. To quote an example in one area, in the area of computer aided engineering design, those gifts have enabled Lowell to go from virtually no equipment at all to what nationally recognized engineers have seen and have stated to be the best collection of equipment for that purpose that they have seen. Lowell has benefited in the last 44 months on the average from $250,000 a month in such donations.

Unfortunately, in those areas where these tax credits do not apply our laboratories are out of date, they are inadequate, they remain a serious continuing impediment to the pursuit of quality education. The same concern applies to the libraries especially to the scientific and technical research libraries which change very rapidly. Tax incentives for equipment donations have been of great value to us here at Lowell and I encourage continuation of expansion of the concept and consideration of more direct grants for library development.

Finally, let me talk about time, the time of the students, the time of the faculty and the time of the area professionals. Most of our full-time undergraduate students work in order to help offset the cost of their education. About 50 percent of them work between 15 and 20 hours a week during the academic year. We are in the coming year planning to initiate an internship program as a component of educational offerings. In this program young and not so young people wishing to matriculate at Lowell will have the opportunity to pursue an intern track. Very simply stated, it is an opportunity to enrich and deepen the experience in the classroom in the academic laboratories by an outside guided internship, if you will a parallel coop program. Funds to assist in the startup of such internship programs would be of great help here at Lowell and I suspect elsewhere where people are addressing the same issue.

The time of our area of practicing professionals and faculty is a limited commodity. Effective ways need to be established to share the time of these two groups if indeed we are to effect a close enough linkage between practitioner and faculty to assure the long-term vitality of each and to maintain a vigorous cross fertilization which will raise the level of interest and the level of commitment of our students to their chosen profession.

Our center for productivity enhancement and advanced materials, our center for the study of public K through 12 school systems and indeed our new doctoral programs in engineering and science which are innovative practitioner degrees I might add all require a mixing and sharing of the time of the faculty in the area of practicing professionals. It would seem to me that it should be possible to greatly facilitate this mixing and sharing of a scarce commodity in a way paralleling the way in which tax credits introduced in the early 1980's have facilitated the donation of scientific and engineering equipment to education institutions.

Let me summarize by saying that from our experience at Lowell deliberately attempting to make use of a public university in order to leverage regional economic development, the overriding problem appears at this point in time at least not to be the debt ceiling, the debt burden of the students, at least not at this point. Between a combination of the grants, loans, work study programs, and waiver of full or partial tuition by the State, we believe that problem is not the overriding one but we are faced with pressing problems in maintaining the quality of our libraries, the quality of our laboratories, to enhance the quality and depth of our educational experiences by providing professional internships, by finding ways that our faculties and students can interact so as to help the faculty and professionals remain current and in order to give a sense of added commitment and interest to our students and to help finally shorten the time between the creation of an idea or a concept and a commercial product or a commercial delivery system.

I think Congress can assist the development of these desired partnerships by continuing and expanding the equipment donation, credits, tax credits by establishing direct grants perhaps with a matching feature for library development, by providing funds for initiation and startup of industrial internships or parallel cooperative education, and by developing incentives to facilitate the mixing and the sharing of the time of our practicing professionals and faculty.

Thank you very much.

Mr. FORD. Thank you. I think we will hear from Mr. Klemmer and then we will have questions for both of you.

[The prepared statement of Howard Klemmer follows:]

Prepared Statement of Howard Klemmer, SKY Computers, Inc.

Gentlemen, education has been the key that opened the doors of opportunity in my life. My beginnings were only slightly better than the families in the Acre here in Lowell, so I understand the value of access to learning and higher education.

It is my opinion that industry has an obligation to society to replace the skill base that is consumes each and evey year in the pursuit of business. How industry accomplishes that task depends on the economy, the opportunity, and the industry leadership.

At SKY Computers, we have initiated small programs to bridge the gap between the university and industry in the following way:

1. SKY has installed a program to develop young technical resources by recruiting bright and ambitious youngsters from the technical high schools, youngsters who otherwise would not go to college. The goal is to acquire hidden talent inexpensively and provide on the job training and SKY paid college training at University of Lowell. The youngsters must attend night school and must attain a B to stay in the program. We offer them on-the-job training, through a series of tasks each intended to renew confidence and reinforce learned skills. The pay starts low and the work is more demanding as they learn. When work is coupled with night school the load becomes tiring. To date, we have six youngsters in the program; two are already making engineering contributions after only 18 months and the others are not far behind.

2. SKY has been and continues to be an active supporter in the university research programs. We are industrial affiliates in the robotics laboratory at Carnegie-Mellon University, also active participants in the productivity center at the University of Lowell, and continuing grantor of the President's Young Investigator Program for Astronomy at Penn State University through the National Science Foundation.

SKY also provides equipment and cooperative development with universities. We have contributed equipment for DNA research at Vanderbilt University, nuclear medicine at University of Virginia, hearing and speech research at Johns-Hopkins University.

3. SKY is also developing a prototype Ph.d. research grant with University of Lowell for development of advanced technology products in partial fulfillment of the doctoral requirements.

We at SKY have instituted these programs for the following reasons:

1. Future return on investment through name recognition and confidence in SKY products.

2. Technology growth through access to opinion makers and leaders in the university environment.

3. Responsibility to keep the "opportunity channel" open for others by giving back a portion of our success to the university for their continued maintenance and growth.

That concludes my prepared statement.

STATEMENT OF HOWARD KLEMMER, EXECUTIVE VICE PRESIDENT, SKY COMPUTERS

Mr. **Klemmer**. Thank you very much. I am one of those companies that Congressman Atkins spoke about that started up in an old mill. We were drawn to Lowell by the low cost of facilities, access to higher education and general willingness of the city to promote and work with small merging companies. We have however labored in the shadow of a big, big company located on connector that you see when you come into Lowell and we use those big buildings of Wang as inspiration each day when we come to work to know that there is a greater goal that we can achieve.

I have a small prepared statement. It is my opinion that industry has an obligation to society to replace the skill base that we consume each and every year in the pursuit of our business. How industry accomplishes that task depends on the economy and the opportunities and on the industry leadership. I can speak of just a small part of that since our company is very small but I believe perhaps one of the most aggressive and supporting university research in the country.

At SKY Computers, a 5-year-old company, we have initiated some programs that bridged the gap between the university and industry in at least three of the following ways. Recognizing that getting technical quality into our company was expensive, we tried an intern program by going right into the vocational high schools and bringing out the bright youngsters who otherwise would not go to college and offered them an opportunity to work side by side with some very, very senior people, very talented people. We started them off with low wages because we wanted them to learn more then to make money and we said that we would pay their way through college if they stayed on the program and attained a B average.

Over the past several years we have six such vocational high school students in our program two of which over the past 18 months have acquired skill bases almost equivalent to that of a first year engineer coming out of college in a practical sense and they have made a lot of money because they have stayed on that very hard and tortuous course of learning. The tasks that they are assigned are sometimes menial but over the course of a few years they are reinforced not only with training but with confidence so that they now are picking up more and more of our business in a profitable way for us.

The second way that we have tried to be helpful is that we have been and continue to be an active supporter in the university research program. We are an industrial affiliate of the Robotics Laboratory at Carnegie-Mellon, we are an active participant in the productivity center right here at the University of Lowell and we are a continuing grantor of the Presidents Young Investigator Program for astronomy at Penn State University through the auspices of the National Science Foundation. We also provide equipment and cooperative development with the universities. We have contributed equipment for DNA research to Vanderbilt University, for nuclear medicine at the University of Virginia and hearing and speech research at Johns Hopkins.

SKY is also developing a prototype Ph.D, research program with the University of Lowell, we will provide a grant to one of the people to work with us in a practical sense to help us develop product, product that will get to market within a year. I think the intent here is for us to receive some return on investment and for a young Ph.D. to immediately see the fruits of his labor and be more valuable to the economy as a whole when he starts his active business life.

Obviously, we have done these programs not because we are altruistic although some of that drive is certainly embodied in our thinking but future returns on investment through name recognition, through confidence in our products and through building up a rapport with the students who will be coming into the business world in the years to come. No. 2, technology growth through access to opinion makers and leaders in the university and the college environment and No. 3, we have a responsibility to keep the opportunity channel open for others by getting back a portion of our success into the university for their continued maintenance and growth.

Thank you.

Mr. **Ford**. Thank you. Mr. Atkins.

Mr. **Atkins**. I would like to explore one question with Mr. Klemmer. In terms of Federal incentive grants or Federal policies, what can you think of that would make it more likely for you to contribute to higher education and by the same token, what that would make it less likely for you to contribute?

Mr. **Klemmer**. We have asked ourselves these questions many times over. As a small company the hardest thing for us to do is to provide funds Many a small company has gone away from the business life because of poor use of cash. We try very hard to provide engineering support or equipment wherever we can. We had a talk with your staff about programs whereby a donation from the business world and from the State would be matched by Federal funds to work with universities and develop curriculums where industry would have a say in that curriculum. I believe that is the Morrill Act. In my thoughts, those programs are in the right direction; however, I think small companies like Sky Computers cannot contribute or participate actively because only the rich can get richer in that kind of an environment. We do not have the cash to provide, we can only provide in-kind services.

What I would like to see is a program where companies would reach out to the students, the young eager lad or gal who wants to go to college and cannot get there and provide some sort of an internship like we are doing and maybe get some recognition with maybe some tax incentives, maybe some opportunity to be given some preferential treatment in bidding on small business contracts with the Government, things of that nature. But I think in the long run, it benefits us to be able to have programs in place to open up the channel to do that. I am sure I have not answered the question as totally as I would like but those are some thoughts.

Mr. **Atkins**. All right, I think that is an important point and is particularly significant in this part of the country, or in other places, where there is a heavy concentration of high technology firms. It is vitally important that we continue to encourage companies like yours to make the equipment donations necessary for keeping university laboratories up to date. This is already a major problem, and—I think it is going to increase as the life cycle of some of the testing equipment that you use in your laboratories get shorter and shorter. The equipment is more and more expensive. As pressure for cost containment builds, one of the first places that university administrators will cut back is the furnishings and equipment for labs.

Mr. **Klemmer**. I might add that the life cycle of the equipment in the lease in the industry that I am in, the high technology as it is called is anywhere between 3 and 5 years and then on the more sophisticated equipment depending on how small it is, it is even shorter. So, what the students are learning at the beginning of their entrance to college by the time they get out may be obsolete so you can see that we in industry have a rigorous path to try to keep our own people up to speed, therefore we really need the close alliance with operations such as Dr. Hogan's.

Mr. ATKINS. I have just one question for Dr. Hogan and that relates to your internship program. Have you given specific thought as to whether to use work study money for internships? What other kinds of Federal support would be appropriate?

Dr. HOGAN. What we are really envisioning is that by another term I think one would call it a parallel coop program that we hope to establish a network of industries and businesses across the State that will enter into this agreement with us so as to place a portion of our students into a sitution where they can learn and earn money rather then just earn. Half of them work 15 to 20 hours a week anyhow so it is an internship off campus in an industrial or commercial setting designed to go on during the academic year and hopefully summer and recess period but clearly it is an attempt to start what I would describe as a parallel co-op arrangement. It is again this question of using the practitioners' time and the students time more effectively. Now what I would like to see is some incentive that would make it easy for a company to find itself willing to enter into those agreements because there will be a choppiness to it, the student comes and goes and is replaced occasionally but I think over time there is great value to it for a region which has very little in the way of natural resources and must depend on development of human talent and unfortunately we are here in an area where the demographics are indicating a very sharp drop in our 18- 19-year-old pull, so there is a concern here for developing the talent that exists and developing it carefully.

Mr. ATKINS. Have you explored the current Federal programs that support cooperative education?

Dr. HOGAN. We have and we are aware of them and we will make some proposals during the year. We were almost ready this year but timing was a bit off. What I am trying to do is encourage continued thinking and focusing on those programs. I am aware that some exist, I also think maybe there could be some rethinking and reshaping. I will admit our experience with equipment donation has been so encouraging that we tend to try to look for parallels.

Mr. ATKINS. I think that is useful. As we move to mark up on this legislation it would be helpful to the committee if you would look at existing Federal statutes funding these programs. Please let us know to what extent you would recommend changes. Most of these programs, particularly the cooperative education portions, which is quite a small program, are designed for the full-time co-op rather then the "parallel track," as you refer to it. Are there changes that can be made that would enable you to use these programs more successfully?

Thank you, Mr. Chairman.

Mr. FORD. Specifically, title VIII, which we call the "Cooperative Education Title," allocates money to the Secretary for grants to support institutions "for the planning, establishment, expansion or carrying out by such institutions of a combination of programs of cooperative education. Such programs shall provide alternative or parallel periods of academic study with public or private employment."

The latter affording students not only the opportunity to earn the funds necessary for their education but so far as practicable giving them work experience related to their academic or occupational objectives. You have here in Massachusetts the outstanding example of success of that at Northeastern. They have been at it longer then anybody in the country and I first learned about them way back in the late 1960's when we were putting the first version of title VIII into the law. Their experience is what we had in mind trying to foster across the country. I am sad to say that there is not very much evidence that it has caught on as a very wide wave but it appeals to me for many of the reasons that people at Northeastern attribute to making their program a success for such a long period of time. You share a very good environment here in this State, a long tradition of more cooperation between business and higher education then you would find as a national rule. And we would be interested if your people who are looking at this find that there is some difficulty for an institution like yours getting some seed money to help you get started.

Dr. HOGAN. Mr. Chairman, it may come as no surprise that I am a graduate of Northeastern University, I think it is a very solid experience.

Mr. FORD. Well then you were infected.

Dr. HOGAN. I was.

Mr. ATKINS. I might add that I, too, am a product of cooperative education at Antioch College, which had the first cooperative education program before even Northeastern's.

Mr. FORD. I do not see Northeastern frowning back there so—Mr. Hayes.

Mr. HAYES. Dr. Hogan, I have maybe what can be categorized as one ballpark question with several facets to it. One, I hope that you can furnish us with a copy of your prepared statement; if possible, I would like to study it a little more but my main question is I noted with interest the kind of progress you have made here at Lowell both I guess within the city and here at the university—oh, I think what you said the past 10 years of progress and I guess my main concern as I always have in the hearings that I have been participating in, is to try to leave with some idea as to what kind of adverse impact the current proposals of the administration are as we proceed to try to find ways and means to reduce this current deficit of $200 billion a year, what kind of a—if they change some of the programs, we hold student loan programs, the grant programs and certainly the Pell Grant Programs are under some real attack and could wind up losing if we are not careful and this I am particularly concerned about because I happen to represent a district which is loaded with disadvantaged students who would like to go to school but without governmental help they probably will not be able to go.

So my question is, how do you see in specific terms the impact on the successful kind of program you have had here if the current proposals as we—I am sure you are familiar with them, go into effect as proposed. And No. 2, I have been getting increasing numbers of constituency mail from heads of universities which in my particular geographical sphere of operation, particularly in the State of Illinois where they express some concerns. I have had visits from them in Washington over the current Tax Reform Program and its possible impact on the contributions from the private sector to the university program and now that is the reason I said it has two facets, two or three facets to it because these are the kind of things that one has to at least come up with some answers or some approach to and God knows we cannot be too quiet about it because we have got some people operating in Washington who act now and think later.

Dr. HOGAN. Let me see, Mr. Hayes, if I can answer what is indeed a very large ballpark question. Let me give a little perspective as to this region and what the University of Lowell has attempted to do. We are in a region where we are really living by our wits more than anything else. The new industrial base is one which succeeds if you are able to add value to a product by design.

Traditionally, that kind of input has come mostly from young people. We are in a region of the country where we are going to experience the largest drop in the 18-, 19-year-old population and probably stay there for a longer period then the rest of the country. Those two factors coming together are very worrisome. Our industry appears to depend on bright ideas that generally tend to come from the younger professional work force and yet we are losing that and so there is a preoccupation here with developing the human resources and as I mentioned in my prepared remarks, to the best of our ability to make the measurement and it is a difficult one, we do not think that the debt burden on the student is the overriding problem, tuition here at Lowell, tuition and mandatory fees like $1,300, $1,400 a year, room, board, tuition, about $4,000. Between the grants, the loans, the work study on campus and a very, very good economy that does provide a lot of jobs on the outside, a lot—it is a great plus for this region, as near as we can tell, students are coping with that today but I think we are on an edge and I think any pressure could cause us to lose people out of the bottom end of that financial structure and thereby lose some young, promising, human talent for us as a region. That is a major concern and we are very worried about it.

But, near as we can tell right now, between the Federal Government and the tuition waiver on the State level and a very good economy that is providing part time jobs and summer employment, it would appear for us, for Lowell in the public sector that the problem is keeping the libraries and the laboratories up to date. But if there is a significant shift to diminish the resources available to the student body, we will lose the only thing we have going for us here in New England, the only thing. There is nothing else and if history has taught us one lesson, it is to stay on the cutting edge of some industrial technology because every time we have fallen off of it in paper and in leather, the early days of the automotive manufacturer, the early and the last days of the textile manufacturer, this region has suffered bitterly, there is nothing else. It is a cold, hostile climate, the end of the supply line, the end of high vocational costs, I think we are all right in terms of the financial support right now. Some people—there will be some hurt, no doubt about it but on the average it appears to be working but any push from where we are is a major threat to what is happening here in this region.

The tax impact, I will be much more direct about. For the past 44 months we have been receiving a quarter of a million dollars in private donations, mostly derived by the tax credits from the 1981 act. Without it we simply could not have achieved the level we are at, nor could we maintain it. The State level of support would simply not be there, at least not without an increase in tuition and we would be right back to your first problem. So, although I think the early signs are very good here at Lowell driven by a good economy, I think we are on an edge, I think we are on a very delicate edge in a delicate balance.

Mr. HAYES. Thank you, Mr. Chair.

Mr. FORD. Thank you very much, gentlemen, we will move on to the next panel, Dianne Ryan, a student at Smith College and Martin Barry, director of student guidance in Framingham South High School.

Without objection, the prepared statements of the witnesses will be inserted in full in the record immediately preceding the point at which they make their comments. We will ask you to comment on your statement, add to it, supplement it or highlight it in whatever way you feel would be most helpful to the record of this hearing.

Dianne, we will call on you first.

[The prepared statement of Dianne Ryan follows:]

PREPARED STATEMENT OF DIANNE RYAN

Mr. Chairman, members of the committee, preparing my testimony for this committee was both painful and difficult because I had to reexamine experiences in my life that I'd rather forget. How can I capture in words the emotional anxieties and stresses "nontraditional students" experience after making the choice to earn a college degree. Who are "nontraditional students," anyway? Can they really afford to choose higher education as a pathway from poverty to financial independence? What will the opportunity to attend college really cost them?

We, "nontraditional students," by definition, are persons who have chosen to reenter the academic world after our education was interrupted for many different reasons. Even though we are a large group, we have no formal organization, no meetings, and all too often no one to advocate for our needs. Usually, we are mothers, single, and as head of household, have the sole responsibility of providing for our families. What binds us together as a group, is that circumstances, not choices, force most of us to accept public assistance as our means for economic survival.

As recipients of "AFDC" we also bear the emotional burden of wearing name tags like "lazy," "stupid," or "freeloader," mythically living a life of luxury at the taxpayers' expense. We, however, are all too well aware that our true rank in society is far below the poverty level.

Our daily schedules and tasks make "Wonder Woman's" job look easy. Choices, that should be simple to make, like "what time to get up," "what to wear," and "what to eat" become part of a complicated series of "tradeoffs" we must be willing to make everyday if we truly want "to make it" through higher education.

We must strategically plan ways to ration our meager monthly grants to meet our children's needs for food, shelter, and clothing. Have you ever tried to reason with a 14-year-old girl that her "Goodwill specials" are as fashionable as her friends' "Calvin Kleins"? We become "masters of excuses"—excuses for Santa Claus, the Easter Bunny, and even the Tooth Fairy. While kids can learn to live without these "special" things, they shouldn't be expected to understand utility shutoff notices when the bills have fallen behind because you chose to buy winter coats and boots the kids need so badly.

It becomes more and more difficult for childern of "nontraditional students" to accept the rationale that "mommy being in school is a good thing." Especially in the middle of a month when you've used up your food stamps, and the little cash left must be used to buy gas for the car to travel the 80-mile round trip to school, or for unplanned textbooks and school supplies. All the kids know is that "mommy going to school" may mean going without milk and bread until the next month's food stamps are received. The food stamps might have been enough to meet the family needs, but the welfare department cut them drastically when they learned you received financial aid that included work-study. You appealed their decision, but the regulations clearly were not in your favor. Logically, you presented them with documentation that your school-related expenses for travel and child care exceeded the $30 earned weekly through work-study, but tuition, books, and mandatory fees are all they would allow as deductions when calculating for your food stamps. Not doing work-study might be easier, but then how would you pay for your gas? Confused, overwhelmed, but maybe still determined, you ask Legal Aid to bring what the hearing officer termed a "legal issue" before a judge in court. You pray that someone will recognize the contradictions between the regulations for public assistance and financial aid. In the meantime, you must be grateful for whât you are getting, and try to get by.

"Time" for a nontraditional student is such a precious commodity. You must stretch it between the children, cooking, laundry, housework, and schoolwork (both your own, and your kids). Then there is grocery shopping to be done, doctor appointments to keep and, of course, welfare wants you to come in for another redetermination. Your receiving financial aid and they must examine it. Your nerves are on edge because you know with each redetermination you are interrogated by a different caseworker. Every aspect of your life will be inspected and you must be prepared to document every standard you live by—rent utilities, bank accounts, type of car, etc. You realize the appointment with the worker is scheduled for the same time as your economics class and according to the syllabus there will be an exam that day. You call and ask the worker to reschedule, but the worker reminds you that your benefits might be cut completely if you fail to keep the appointment. Tearfully, you beg the worker to change the appointment. In his mercy, he does, but now it is scheduled at the same time as your English class. Well, at least you won't miss your exam.

During the redetermination, you quickly learn that the caseworker isn't interested that you had to pay extra child care because two papers were due. The papers were required to be typed. You don't have a typewriter and you had to use the one available at the school library. The worker isn't interested in how much extra time you had to "pay" for to do your research. The car repair bill this month was $150 and the coil in your hot water heater needed to be replaced at $133. He looks at your "financial aid," shakes his head, and warns you to expect your grant to be cut. You ask the worker, "Why they make it so difficult for you to succeed?" With not even a hint of understanding in his voice he tells you: "It's the regulations." All you want is a chance to get to a point in your life where you can be independent of welfare. Few "nontraditional students" survive a redetermination at the welfare office without their dignity wounded, feeling ashamed, their dreams shattered, and benefits cut.

The story I am telling you about "nontraditional students" is not fiction. This story has been real life incidents for me, and many other nontraditional students. If we want a college education, we must cope with financial barriers created by regulations that do not recognize that our expenses of attending college are a lot more than books, tuition and fees. Our "need" as determined by financial aid officers may recognize and allow for some of these "extra" expenses, but Welfare will not.

In March 1983, I made a decision to end a violent domestic relationship with my husband of 13 years. I am 33 years old, and the mother of four children ages 4, 6, 9, and 14. From the beginning days of "AFDC," I have known the challenge of meeting my family's basic needs of food, shelter, and clothing, and managing a college education.

During my first welfare interview, I told the welfare worker that I wanted to complete my college education. In my naivete, I thought he would be pleased that I wanted to do something to get off welfare. Instead, he laughed, then sternly told me not to set my hopes that high.

Despite his warnings, I have made the choice to be a "nontraditional student." In June of this year, I graduated with honors from Greenfield Community College. In January, I was accepted as an Ada Comstock Scholar at Smith College in Northhampton, and have completed my first semester there. I am majoring in economics, with a minor in public policy. Sometimes, I even dream of going to law school, or becoming a politician.

Through participating in the work-study program I have gained experience as a grantwriter, and as an administrative assistant. I use the "Rob Peter to pay Paul" system of budget management. With the grace of God, my family is still financially able to stay a week ahead of the utility shutoffs.

I know I don't want to continue barely existing on welfare. More important, I am beginning to realize a sense of control over my life. But, I must admit that I feel ambivalent about the prospects of continuing with my career plans. I am confident I have the talent to be successful, but I am not sure I have the energy to continue struggling with the financial barriers imposed upon me.

For now, what I hold on to is the belief that legislators, such as yourselves, will recognize that receiving financial aid can penalize the very people it is intended to help. I hope that you can care enough about me, my children and others like us, to implement legislation that will reconcile the inconsistencies between public assistance and financial aid programs, and make the goals of "nontraditional students" a little easier to achieve.

Thank you.

UNITED STATES DISTRICT COURT

DISTRICT OF MASSACHUSETTS

DIANNE RYAN,
Plaintiff

vs.

COMMISSIONER OF PUBLIC WELFARE,
Defendant and Third-Party
Plaintiff

vs.

JOHN BLOCK, Secretary of
Department of Agriculture,
Intervenor and Third-Party
Defendant

Civil Action No. 85-0040-F

PLAINTIFF'S MEMORANDUM IN SUPPORT OF MOTION FOR REMAND TO STATE COURT

INTRODUCTION

This is an action brought to review a final administrative decision of Defendant Commissioner of Public Welfare (hereafter "Commissioner"), pursuant to M.G.L. c. 30A §14. The part of the decision that is challenged by Plaintiff held that College Work-Study (CWS) allocations from the Department of Education are not considered student financial assistance for purposes of Food Stamp programs administered by the Commissioner. Plaintiff seeks a declaration that CWS is student financial assistance, a reversal of the challenged administrative decision insofar as it finds otherwise and a remand to the

Commissioner for a determination of the amount of Food Stamps Plaintiff should receive under the principles enunciated by the Court.

Presently before the Court is Plaintiff's Motion to Remand this action to the state court from which it was removed.

PROCEDURAL HISTORY

The action was originally filed on February 21, 1984 in the Massachusetts Superior Court, which has exclusive jurisdiction over appeals from administrative agency decisions pursuant to M.G.L. c. 30A §14 The Commissioner filed his answer on March 23, 1984. Plaintiff filed an Amended Complaint on July 17, 1984 with the assent of the Commissioner.

In October, 1984 Plaintiff moved for reversal of the Commissioner's decision. Just prior to the hearing on that motion, on December 19, 1984 the Commissioner filed a "Motion to Bring In Third-Party," seeking to implead the Secretary of the United States Department of Agriculture ("Secretary" or "USDA"). In addition, on December 21, 1984, the Secretary moved to intervene in this action as a Defendant.

Both the Commissioner's Motion to Implead and the Secretary's Motion to Intervene were allowed by the Superior Court (Griffin, J.). Thus, USDA is now both a Defendant and a Third-Party Defendant.

Finally, in February, 1985 the Secretary filed a Petition for Removal in the Massachusetts state court. Pursuant to that Petition the action has been removed and is now pending in this Court.

(2)

FACTS[1]

Plaintiff Dianne Ryan is a recipient of Food Stamps from the Department of Public Welfare ("Department") for herself and her four minor children. On November 23, 1983 Ms. Ryan was notified that her monthly Food Stamp allotment would be reduced from $212.00 to $121.00 (Tr.3). The reason for the change was that the Department was counting as income student financial aid received by Ms. Ryan in order to allow her to attend GCC (Tr. 3).

To meet the high costs of attendance at GCC, Ms. Ryan was awarded financial aid totalling $3,716.00 for the 83-84 academic year. This financial aid came in from five different forms: a tuition waiver from GCC ($634); a College Work Study position ($1,120); a Pell Grant ($1,162); a Supplemental Educational Opportunity Grant (SEOG) ($400); and a National Direct Student Loan (NDSL) ($400); (Tr. 3, 4). All of the financial aid, except the tuition waiver, is from programs funded and administered by the federal government.

Of the financial aid received by Ms. Ryan, $3,180. went to pay expenses incurred as a result of her school attendance including tuition and fees ($788), books and supplies ($276), transportation to and from school ($1,136) and child care costs ($980) (Tr. Exh. 'D').

When the Department evaluated Ms. Ryan's Financial aid the entire amount was considered to be countable income, with the exception of tuition, mandatory fees, and expenses for books and supplies. No deduction was made for transportation and child care.

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[1] This statement of facts is taken from Plantiff's Memorandum In Support of Motion for Reversal of Agency Decision. The facts are stated as they existed at the time of the administrative hearing. References (Tr.) are to pages of the administrative record filed with the Commissioner's Answer.

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Ms. Ryan appealed the Department's decision and a hearing was held on February 1, 1984. A hearing decision issued on February 17, 1984 held that Ms. Ryan's educational expenses exceeded her financial aid income, exclusive of CWS. However, the Appeals Referee counted as income in determining the Food Stamp allotment all of Ms. Ryan's CWS. The Appeals Referee refused to consider Ms. Ryan's argument that CWS is financial aid because that argument "extend[s] beyond the scope of review of an appeals referee. Referees do not render decisions which require their determination of the legality of Department regulations." (Hearing Decision, p. 4).

The instant action was timely filed following the issuance of the hearing decision.

ARGUMENT

I. THIS COURT LACKS REMOVAL JURISDICTION UNDER 28 U.S.C. §1442(a)(1)

The only jurisdictional basis for removal cited by the Secretary is 28 U.S.C. §1442(a) (1) which provides for removal of a civil action against:

> Any officer of the United States or any agency thereof, or any person acting under him, for any act under color of such office . . . . (emphasis supplied)

The Secretary is obviously an officer of the United States. However, neither Plaintiff's Amended Complaint nor the Third-

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Party Complaint challenge any action (or even the failure to take action) of the Secretary. At best, the Third-Party Complaint can be read to seek an order that the Secretary remain inactive (by not imposing penalties) if the Plaintiff prevails.

An "act" denotes something affirmative in that it is "a performance", "a deed", or an "exercise of power." Black's Law Dictionary, (5th Ed. 1979). The Secretary has not taken any affirmative steps, nor has he declined to take any steps.

Federal courts have strictly enforced the requirement that, to be removable, an action against a federal officer must be based on an act of the officer. Where the Secretary of Housing and Urban Development was made a defendant to a state court condemnation proceeding because HUD held title to the property in question, there was no removal jurisdiction. Even though the rights and interests of HUD were at stake, the action was based on HUD's title to the property rather than any action HUD had taken. In re 73rd Precinct Station House, Borough of Brooklyn 329 F.Supp. 1175 (E.D.N.Y. 1971). Also, in National Audobon Society v. Department of Water & Power of City of Los Angeles, 496 F.Supp 499 (E.D.Ca. 1980) the Court found that three causes of action against federal agencies which related only to the title and rights of those agencies were not removable. (The Court, however, found removal appropriate on the basis of a fourth cause of action which was based on the activities of the agencies.[2]

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[2] The decision in Kozera v Spirito,723 F.2d 1003 (1st Cir. 1983) does not undercut Plaintiff's argument for remand. Although Kozera dealt with an action removed by the Secretary of Health and Human Services, the issue of removal jurisdiction was never argued or decided. As the Supreme Court recently stated [continued on next page]

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As stated by the Court in National Audobon Society "The test must be whether the lawsuit, whatever its form, is predicated upon an act of a statutorily defined 'person' which is done under the color of office." 496 F.Supp. at 507. Moreover, the Court also said that "the removal statute not only requires that there be an "act' but that the suit be 'for' the act." Id. Neither of these prerequisites for §1442 removal is met. Since the Secretary lacked a proper basis for removal this action should be remanded to the Massachusetts Superior Court.

II. THIS COURT LACKS JURISDICTION OVER PLAINTIFF'S ORIGINAL ACTION

Plaintiff's only claims in her original complaint are for declaratory relief reversal of the Commissioner's administrative decision and for remand to the Commissioner for determination of the amount of retroactive relief Plaintiff is entitled to. However, this Court does not have jurisdiction over any claim for retroactive relief. See, e.g. Edelman v. Jordan, 415 U.S. 651, 673 (1974). The waiver of Massachusetts sovereign immunity in the state courts pursuant to M.G.L. c. 30A §14 is not a waiver of its Eleventh Amendment immunity in the federal courts. Florida Department of Health v. Florida Nursing Home Assn., 450 U.S. 147 150 (1981)(per curium).

Even though jurisdiction over Plaintiff's claim is lacking,

[2 cont.] "When questions of jursidiction have been passed on in prior decisions sub silentio, this Court never considered itself bound when a subsequent case finally brings the jurisdictional issue before us." Pennhurst State School and Hospital v. Halderman, -- U.S. -- ; 104 S.Ct. 918 (1984), quoting Hagans v. Lavine, 415 U.S. 528, 533 n.5 (1974). This doctrine must apply to other federal courts as well.

Plaintiff expects the Defendant to argue that jurisdiction over the retroactive claim is achieved by principles of pendent jurisdiction. However, the very recent Supreme Court decision in *Pennhurst State School and Hospital v. Halderman*, -- U.S. -- , 104 S.Ct. 900 (1984) holds that "neither pendent jurisdiction nor any other basis of jurisdiction may override the Eleventh Amendment". *Id.* at 919 (footnote omitted). Thus, this Court should remand this action to the Massachusetts Superior Court which *does* have jurisdiction to adjudicate all of the claims in this action. To do otherwise would frustrate the policy of judicial efficiency calling for adjudication of all claims in one proceeding. *Avery v. Heckler*, 584 F.Supp. 312, (D.Mass. 1984), citing *Kozera v. Spirito*, *supra*.

III. AS A MATTER OF POLICY THIS ACTION BELONGS IN STATE COURT

In this memorandum Plaintiff has raised two legal bases which mandate the return of her case to the state court. However, there are also strong public policy arguments supporting the same result. As discussed in §II, *supra*, retention of this case by the federal court may well result in the denial of retroactive relief[3]. Plaintiff's right to recover benefits due to her should not be pushed aside so that the Secretary may litigate in a more convenient court. The Secretary will be able to present his views in state court as well as he could in federal court.

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[3] This is an additional basis for distinguishing *Kozera v. Spirito*, *supra*, as the decision does not mention a claim for retroactive relief. In fact, *Kozera* specifically recognizes that the unique procedural posture of these cases might prejudice the Plaintiff and envisions remand in those cases. 723 F2d at 1011.

An additional policy reason for remanding this action to state court arises from an examination of this Court's docket. At the present time the federal government has removed at least seven state court actions relating to either AFDC or Food Stamp benefits. Presumably, a proportionally greater number of cases await the judge's sitting in Boston. As this simple case demonstrates, every garden variety petition for judicial review could be transformed into a complex federal court action. In nearly every welfare appeal to state court, a potential federal issue is involved (either a constitutional issue, or an issue involving a federal statute or regulation). Many hundreds of these actions are filed each year. If the state has now decided that it must have the Secretary joined in each of these actions so that it is crystal clear whether FFP is available, all of these state court actions will wind up in federal court. In many of these cases, they will be bogged down with motions to remand and other procedural matters. Furthermore, most of these actions contain state court claims as well as federal claims. In light of the Supreme Court's decision in Pennhurst State School and Hospital, supra, presumably any state claims involved in cases removed to federal court must be dismissed or remanded to state court because the federal courts no longer have the authority to issue injunctive relief against the state based on the state claims. The result of wholesale filing of third-party complaints and subsequent removal to federal court will be that many cases will be fragmented between state and federal court, thus failing to achieve the purpose of the Defendant to bring in the Secretary in the first place.

Finally, there is no indication that the state courts are an unfair or inappropriate forum for deciding the issue in this case. The threat of flooding the federal courts with cases that ought to be state court proceedings, as well as the denial of Plaintiff's original choice of forum, presents strong public policy reasons for remanding this action to state court.

CONCLUSION

For the reasons set forth above, Plaintiff requests that this Court remand this action to the Massachusetts Superior Court.

Respectfully submitted,

3/12/85
Date

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(16)

STATEMENT OF DIANNE RYAN, STUDENT, SMITH COLLEGE

Ms. RYAN. Mr. Chairman, members of the committee, preparing my testimony for this committee was both painful and difficult because I had to examine experiences in my life that I would rather forget. How can I capture in words the emotional anxieties and stresses nontraditional students experience after making the choice to earn a college degree. Who are the nontraditional students anyway, can they really afford to choose higher education as a pathway from poverty to financial independence? What will the opportunity to attend college really cost them?

We nontraditional students by definition are persons who have chosen to reenter the academic world after our education was interrupted for many different reasons. Even though we are a large group, we have no formal organization, no meetings and all too often no one to advocate for our needs. Usually, we are mothers, single and as head of household have the sole responsibility of providing for our families. What binds us together as a group is that circumstances, not choices force most of us to accept public assistance as our means for economic survival.

As recipients of AFDC, we also bear the emotional burden of wearing name tags like lazy, stupid, or freeloader mythically living a life of luxury at the taxpayers' expense. We, however, are all too well aware that our true rank in society is far below the poverty level.

Our daily schedules and tests make Wonder Woman's job look easy. Choices, that should be simple to make like what time to get up, what to eat, what to wear become part of a complicated series of tradeoffs we must be willing to make everyday if we truly want to make it through higher education.

We must strategically plan ways to ration our meager monthly grants to meet our children's needs for food, shelter, and clothing. Have you ever tried to reason with a 14-year-old girl that her Goodwill specials are as fashionable as her friends' Calvin Kleins? We become masters of excuses, excuses for Santa Claus, the Easter Bunny and even the Tooth Fairy. While kids can learn to live without these special things, they should not be expected to understand utility shutoff notices when the bills have fallen behind because you choose to buy winter coats and boots the kids needed so badly.

It becomes more and more difficult for children of nontraditional students to accept the rationale that mommy being in school is a good thing especially in the middle of the month when you have used up your food stamps and the little cash left must be used to buy gas for the car to travel the 80-mile round trip to school or for unplanned text books and school supplies. All the kids know is that mommy going to school may mean going without milk and bread until the next month's food stamps are received. The food stamps might have been enough to meet the family needs but the welfare department cut them drastically when they learned you receive financial aid that included work study. You appeal their decision but the regulations clearly were not in your favor. Logically, you presented them with documentation that your school-related expenses for travel and child care exceeded the $30 earned weekly through work study but tuition, books, mandatory fees, are all they would allow as deductions when calculating for your food stamps.

Not doing work study might be easier but then how would you pay for your gas? Confused, overwhelmed but maybe still determined you ask Legal Aid to bring what the hearing officer termed a legal issue before a judge in court. You pray that someone will recognize the contradictions between the regulations for public assistance and financial aid. In the meantime, you must be grateful for what you are getting and try to get by.

Time for a nontraditional student is such a precious commodity. You must stretch it between the children, cooking, laundry, housework and school work, both your own and your kids. Then there is grocery shopping to be done, doctor appointments to keep and of course welfare wants you to come in for another redetermination. You are receiving financial aid and they must examine it. Your nerves are on edge because you know with each redetermination you are interrogated by a different case worker. Every aspect of your life will be inspected and you must be prepared to document every standard you live by, rent, utilities, bank accounts, type of card, et cetera.

You realize the appointment with the worker is scheduled for the same time as your economics class and according to the syllabus, there will be an exam that day. You call and ask the worker to reschedule, but the worker reminds you that your benefits might be cut completely if you fail to keep the appointment. Tearfully you get the worker to change the appointment, in his mercy, he does but now it is scheduled at the same time as your English class, well, at least you will not miss your exam.

During the redetermination you quickly learn that the case worker is not interested that you had to pay extra child care because two papers were due. The papers were required to be typed, you do not have a typewriter and you had to use the one available at the school library. The worker is not interested in how much extra time you had to pay for to do your research. The car repair bill this month was $150 and the coil in your hot water heater needed to be replaced at $133. He looks at your financial aid, shakes his head and warns you to expect your grant to be cut. You ask the worker why they make it so difficult for you to succeed; with not even a hint of understanding in his voice, he tells you, "it's the regulations." All you want is a chance to get to a point in your life where you can be independent of welfare. Few nontraditional students survive a redetermination at the welfare office without their dignity wounded feeling ashamed, their dreams shattered and benefit cuts.

The story I am telling you about nontraditional students is not fiction. This story has been a real life incident for me and for many other nontraditional students. If we want a college education, we must cope with financial barriers created by regulations that do not recognize that our expenses of attending college are a lot more than books, tuition, and fees. Our need if determined by a financial officer may recognize and allow for some of these extra expenses but welfare will not.

In March 1983, I made a decision to end the violent domestic relationship with my husband of 13 years. I am 33 years old and the mother of four children, ages 4, 6, 9, and 14. From the beginning days of AFDC I have known the challenge of meeting my family's basic needs of food, shelter, and clothing and managing a college education.

During my first welfare interview, I told the welfare worker that I wanted to complete my college education. In my naivete, I thought he would be pleased that I wanted to do something to get off welfare, instead he laughed, then sternly told me not to set my hopes that high.

Despite his warnings, I have made the choice to be a nontraditional student. In June of this year I graduated with honors from Greenfield Community College. In January, I was accepted as an Ada Comstock Scholar at Smith College in Northampton and have completed my first semester there. I am majoring in economics with a minor in public policy. Sometimes I even dream of going to law school or becoming a politician.

Through participating in the work study program, I have gained experience as a grant writer and as an administrative assistant. I used the rob Peter to pay Paul system of budget management. With the grace of God, my family is still financially able to stay a week ahead of the utility shutoffs.

I know I do not want to continue barely existing on welfare, more important, I am beginning to realize a sense of control over my life but I must admit that I feel ambivalent about the prospects to continue with my career plans. I am confident I have the talent to be successful, but I am not sure I have the energy to continue struggling with the financial barriers imposed upon me.

For now, what I hold onto is the belief that legislators such as yourselves will recognize that receiving financial aid can penalize the very people it is intended to help. I hope that you can care enough about me, my children, and others like us to implement legislation that will reconcile the inconsistencies between public assistance and financial aid programs and make the goals of nontraditional students a little easier to achieve.

Thank you.

Mr. Ford. Thank you. Mr. Barry.

STATEMENT OF MARTIN BARRY, DIRECTOR OF STUDENT GUIDANCE, FRAMINGHAM SOUTH HIGH SCHOOL

Mr. Barry. OK, thank you. Chairman Ford, members of the committee, I would like to let Chairman Ford know that I left Cape Cod at about 6 this morning and it was beautiful there and I am going back this afternoon so if you would care to hook a ride, you would be most welcome.

Throughout the 12 years that I have worked as a high school guidance counselor in Massachusetts and the 5 years previous to that in other aspects of education I have observed many changes, many definite changes in the ways that students and parents view, prepare for and take advantage of the opportunities for higher education that exist in our country.

Back in the 1960's and the early 1970's, parents—it seemed that the goal of parents and students was merely to go to college and once there to explore the opportunities available to them, to study in various curricula and the different areas of life however impractical or practical they may be and then to choose a career.

The costs of higher education were borne primarily by those students and those parents who had saved and worked altruistically to finance that kind of an education. The changes began to come with an increase in Government aid which however was accompanied by a more drastic increase in the cost of college throughout the 1970's and continuing today in the 1980's. In addition, there has been a shift in emphasis from grant money to loan programs. Many students now graduate from college several thousand dollars in debt; if they decide to go on to graduate school the situation usually worsens considerably. These developments have caused parents and students to put a lot more thought and time into their college and career choices.

A job of a guidance counselor many times used to be to help only with the question of where do I go to college now we begin by helping to find answers to much more difficult questions such as should I go to college, is it worth it, what should I study, how much will I make after I graduate and the one that can cruelly shatter the dreams of young people, how can I pay for it.

Parents are no longer always satisfied to finance the college education of a liberal arts student or even worse a potential teacher. They are very reluctant to commit large sums of money or to advise their children to go into debt when they read articles or hear news reports about large numbers of college graduates who are unable to find jobs.

We counselors are asked about employment projections for graduates in various majors and is no accident that accounting has replaced psychology as the most popular college major today. We do see many students and talk to many students who would love to study literature, history, or biology but instead end up applying to college as finance, marketing or engineering majors. These are second choices for them but they are more realistic in view of the economic picture.

We also see students who select less competitive colleges and decide to commute to local schools rather then go away to a more expensive college, that however would provide them with a better preparation for their particular future. Here in the Boston area we are very fortunate to have many marvelous institutions of higher learning within commuting distance but for the rest of the country, for much of the rest of the country that is not the case.

Each student who comes into the office of a high school guidance counselor has a unique background, a way of perceiving the world and a set of goals and aspirations. However, certain situations do tend to repeat themselves and I have prepared three typical scenarios that represent the college cost dilemma and the way it affects students from different backgrounds. First is the student from an impoverished background, even if full aid is available, the likelihood is that a substantial portion of this aid is in the form of loan whether a national defense student loan or guaranteed student loan. More will come from a work study program in which the student will be compensated basically at the minimum wage rate. For the perspective student in this category, the reality of life 4 years hence is to be financially much worse off, they will graduate at least $10,000 in debt and will have virtually no assets. Some will find this perspective overwhelming and decline the opportunity. Many of these students come from families in which the spector of debt is frightening if there has been bad experience with it and they will avoid this at all costs. They do not view the loan opportunity as an opportunity so much as a serious pitfall.

Others will take the challenge but will choose very career oriented majors and programs knowing that graduate school is probably out of the question. Most of these students come from home situations that are difficult at best, they have aspirations but they also have a set of realistic ideas and unfortunately we are cutting off those aspirations for them.

It is extremely difficult for these students to look 10 or 15 years down the road to see a profitable return on their investment of time and basically which is their life.

The second situation involves students from middle-income families whose parents may or may not be college graduates. The parents have the usual dreams and ambitions for their children but are skeptical about the return on the investment of dollars that have been hard earned. Students from these backgrounds may qualify for some aid but definitely not fully. It is in cases like these that we see the greatest limitations and the choice of college. They are most likely to avoid a large debt incumberance and choose to attend a public or State supported college. They may very well receive a fine education but the limitation on their choice tends to create a stratified society in which only the affluent or the very poor can afford our private universities. This does not hold well for the future of our democracy.

The third and final situation I will discuss is the child of upper, middle-income parents. He or she will definitely go to college, but the choice of school and the course of study will still be affected, if not determined, by cost considerations. First, there is the matter of need, blind admissions. Throughout the 1960's and the 1970's, colleges routinely boasted that they did not consider the financial need of the applicant in making an admissions decision; however, in the last 5 years many of our prestigious colleges have backed off from that statement, need, blind admissions is no longer a reality in many schools. Again, this stratifies the society. If it is obvious that you can afford it, you do have a better chance of getting into the prestigious college.

This puts parents who can afford most, but not all of their children's education, in a difficult bind. By indicating financial need, they may be hurting their chance of a student getting into the school of their choice. When they are younger, children who are also looking toward college, the choice becomes even more torturous.

In summary, the amount and form of the financial aid that is available to students are extremely important factors in the decisions that will determine the future for many of our young students and consequently, the future of America. Our democratic society has become very complex and educational opportunity is the great equalizer that allows a democracy to work. When we allow choices to be eliminated by financial constraints, we run the risk of elitism where the wealthy will benefit from the best we have to offer and the rest will be limited to that which is less expensive and often less desirable.

Thank you.

Mr. FORD. Thank you. Let me ask you, Mr. Barry, you are director of student guidance at a high school, how big is the student population?

Mr. BARRY. The student population is approximately 1,100 students.

Mr. FORD. And how many full time guidance counselors do you have?

Mr. BARRY. We have five full time.

Mr. FORD. And, that is well above average?

Mr. BARRY. Yes. Which I may add is a very good situation. I might also add that the student body comes from virtually every strata of society. We have students from many substantial minority population, from poverty backgrounds, we have a large Hispanic population, we also have middle class students and students who could be considered wealthy.

Mr. FORD. How much impact this spring did the President's statements have? Are they middle-class children we are talking about making their choice about college?

Mr. BARRY. I am not sure if there was a sudden impact or a sudden realization just this spring; however, I think it is something that has been coming gradually and impacting gradually as each decision is made, as the cost of college rises and the Government money, although it has remained relatively stable, has not kept up with that cost, is that the choices are sort of moving down the ladder. They are—I do not know whether you would call them realistic, but they are opting for, in much greater numbers for more practical neighbors, for schools that are very close to home, that type of thing. I think was just in addition—an additional realization that there will be less money available.

Mr. FORD. Well, the distinction has been made to the committee from a number of sources that the publicity given to the proposed budget suggesting that the resources were going to be cut off for middle class. Everybody in my district thinks they are middle class. If they are on ADC, they are still middle class, there is just temporary difficulty. If you ask 100 people in my district ranging from somebody on ADC to somebody making $200,000 a year, are you rich, are you poor, are you middle class, the answer would always be middle class. So when you launch an attack on the middle class, you get a lot of attention, and we in Congress realized that somebody got their attention very quickly, that has been a plus and a minus. That has been a plus in awakening part of the population to how they and their families would be directly impacted by such policies. There has been a minus from people like yourself who are telling us that the common gossip that goes on in the street, talk that goes between the young people in high school is such that, well, it looks like we are going back to the old deal unless your family is on welfare, you cannot get any Federal aid, and because my dad and mother both work to keep us going, I will not get any help. Have you been able to determine the extent to which that has impacted on your seniors this year and what they are going to do next year?

Mr. **Barry**. Let me say that is very difficult to assess, certainly empirically the impact that something like that will have, it is a personal reaction that they are much more aware of how they are going to pay for college, they are also looking further down the line and opting out of graduate school at a very early age. I think that has been very noticeable in the choice of major. And, there used to be a lot of students who would go off to college having saved or covered the first year, and students are much less reluctant to do that, in other words, go off with knowing you have the first year and feeling that things will fall into place, they are not doing that as much. They are looking further ahead, they are becoming a lot more conscious of it, the publicity, as you say, has certainly made them aware of the cost of college. Maybe there are some positive aspects to it in that they are thinking and planning more carefully. There are some negatives in that they are placing limitations on themselves that may not be necessary, and some of the limitations are necessary.

Mr. **Ford**. Well, when the President says something is going to happen, there is a tendency particularly with this President who has a tremendous ability to communicate directly with people the belief that it is going to happen. The facts are quite different. There was great publicity given in the newspapers about the $32,500 family income cap, the $25,000 cap for all the other programs, the upfront money changing independent students. We estimated these changes would probably knock close to two million people out of the program. Nobody that I am aware of on our Committee or on the Senate Committee in either political party has ever endorsed any of those drastic changes.

The House and the Senate do not have agreement on a budget at this point. The budget is not held up by disagreement on our issue because both the House and the Senate looked at it and said we are not interested in that kind of radical surgery and neither budget when they are ultimately merged together incorporates the assumption that the Congress would in fact make these changes. That is not in the newspapers or on a television program. It is not something the Secretary is going to say as forcefully as he said the things about stereos and vacations and other things, that got a lot of attention. But even if we could get the Secretary now to say that realistically he realizes that that is not going to happen, it would not get very much attention. It bothers us because we know that in 1981 when the Congress unfortunately adopted over our strenuous objection the so called Gramm-Latta budget package, they started out to dismantle everything we had done in the 1980 reauthorization. We were able to patch a good deal of that back together before the process finished but the word that it has been patched back together did not get out there and urban colleges told us that they had as much as 22-percent drop in the number of applicants for the next period of enrollment which they attributed in large part to the perception that was created in the minds of parents and prospective students. I am very much concerned about your profession because one of the scandals of American high schools is the terrible understaffing with guidance counselors.

I represent a district of predominantly blue collar people where a high percentage of the young people who will participate in these programs are first generation college attendees. They do not have either a parent or a sibling who has been there who can tell them it can be done. If there isn't a high school counselor who can take a little bit of time and explore with them the possibilities that are available, they never get the message. They get it in the boys room. They do not have access because my average high school would have probably 600 students per counselor and they tell me that they are lucky if they meet half of them for as much as 5 minutes during the course of the year.

Mr. BARRY. I am sure that is true.

Mr. FORD. The kid who is in trouble with dope, the kid who is in trouble for something else takes up all the time and they do not have time to sit down and talk about going to college to students as much as they would like to. Unfortunately our State has recently gone through a depression which many parts of the country refer to the recession. To Michigan it was as bad as the great Depression. Our schools suffered very badly, their budgets were cut. What happens when you cut the budget? The first thing you do is get rid of the band and then you cut back on athletics and right along with it you get rid of nonessential people like guidance counselors.

Teachers standing in front of a group of children are essential but counselors telling somebody how to use the resources of that school and the system for their own and the country's future are not unfortunately. Do you belong to any association of counselors?

Mr. BARRY. Yes, several, the American Personnel and Guidance Association and the National Association of College Emissions Counselors.

Mr. FORD. Do you care to communicate with the committee and I am not going to ask you to do it now, some examples of what you think that association is or can be doing to better inform the populus, their client population about the realities of the way these things happen? You know every year, this is now the fifth year, David Stockman has come up with a horrendous list of changes in student aid. The Congress has time after time while cutting the devil out of other programs rejected those in the field of education primarily because we can all read the polls and the polls tell us that consistently the single most popular expenditure that the Congress makes of their tax money is in education. They do not like foreign aid, they are not too sure that they want to see very much in the way of foreign involvement, they do not like ADC, they do not like food stamps, they do not like things that they think other people benefit from that they are paying for, but education whether they have somebody in school or not, they seem to still recognize it as a valuable asset to the society, something well worth putting money in. For that reason politically it is not in my mind, and I am not being overly optimistic when I say this, likely that any of the drastic changes that were proposed this year are going to go any further then they did when they were proposed in a different form in recent years past. So, now that leaves us with the frustration, I wonder if the people who ought to know have enough confidence in the American political system to be willing to take a chance on making a career choice on what they think Congress will recognize as the right way to go.

We will not see a "60 Minutes program" on this side of the issue. We will see more 60 Minutes programs finding some idiot out there who says, "I got a Ph.D. and I do not have a job so I am not paying my student loan" and than 50 percent of my constituents believe that people never pay their student loans when the true fact is, as we know, that less then 5 percent of the $35 billion we have in banks and secondary markets now are in default. Yet, one program like that will convince the majority of the population that the people who get this are undeserving bums who take it and run. We still have people who think you can take out a student loan and buy a sports car. Coming from Detroit, I have always found that kind of amusing because I do not know where in the world you can find a sports car for $2,500 but nevertheless we keep hearing of them. We have never been able to find them but there must be a lot of them out there because everybody knows they are there.

Ms. Ryan, you will be interested to know that a lady from the other party in the Congress on July 17 introduced a bill to deal specifically with the problem you outlined to us. It is not the first time we have heard of the problem at this committee. Unfortunately, those regulations are not under us and, as crazy as it may seem to a person in your circumstances, that program is administered by the Department of Agriculture and the legislation is written by the Agriculture Committees of the two Houses. Why? Because food stamps were never intended in the beginning to be helpful to you; it was intended as a program to be helpful to farmers. That purchasing power, which is many billions of dollars, is essential to prop up the market for the people who grow that stuff and process it and haul it and all the rest of it. So if you hear somebody say to you that, as a recipient of food stamps, you are on a welfare program, tell them they are right except they are probably making a mistake about who is getting the welfare. It is not me with my food stamps; it is the people who make a profit out of everything that I buy with those food stamps and that is why the Agriculture Committee protects it so nicely. And you can carry it a step further. If your children are participating in a milk program, the milk program did not get into the schools because people realized that it was important to put milk in the stomachs of little children when you were trying to teach them. It got there because farmers who produce milk wanted something to prop up their market. And again, when we talk about those programs, we have to go negotiate with the agricultural interests. The No. 1 concern is, Can we show them that it affects purchasing power for the products of those farmers? I intend to talk to Olympia Snowe and see if we can help develop a picture of just how important some of the people involved with education are to keeping that $14-or-$16-billion-a-year welfare program for farmers going. And I will make sure that Olympia Snowe, who is from the State of Maine, has the benefit of your testimony. We incidentally had in New York City a lady who at your stage was on ADC and food stamps and attending a proprietary school and now is an independent businesswoman operating her own beauty salon in New York City, and raised her children while she was doing this. She started very much like you. So, we are also seeing that people like you do make it and I am sure that there is no one on this committee, no one at all who is not already sensitized to the fact that there are enough success stories out there to justify the investment. I think it is safe to predict that you are going to be one of those success stories, too.

Ms. RYAN. Let us hope so.

Mr. FORD. If most of the college graduates that we are exposed to could have your ability to express yourself and to be articulate in the way in which you have done it orally and the way in which you prepared your testimony, their professors would believe they had done a very good job with them. Somebody has been helping you in a way that has obviously been very effective. We appreciate your testimony and assure you that it is going to be taken seriously.

Mr. Atkins.

Mr. ATKINS. I want first to thank Ms. Ryan for her very moving testimony. When I was in the State legislature there was an absolute bar on people on AFDC in Massachusetts going to community colleges. I was part of the successful effort to change those regulations and I believe there are now several hundred AFDC recipients attending college. This may be the greatest single investment we make with public assistance programs in terms of giving people the tools and skills to make choices and become self-sufficient.

I am particularly interested in the Comstock Scholar Program at Smith College and specifically in your sense as to how it is working. Could you give us just a brief description of the program? One of the things that I would want to look at when the committee proceeds to its markup of the higher ed reauthorization is whether there is something that we can do nationally to encourage efforts like the Comstock Scholar Program. I believe it is the only one of its kind in the country; isn't it?

Ms. RYAN. Right. This is one of my attractions to making the choice to attend Smith College. I crossed the barrier from the what you call the middle income but low income to a school that has traditionally been known to be for the wealthy. The Ada Comstock Scholar Program for a nontraditional student is designed for nontraditional students, there are women whose education has been interrupted in addition to the financial aid. They really sit down and try to assess what your needs are going to be and try to find ways to help you meet those needs. I am very fortunate; I do not know what is going to happen with welfare but they have a system for women on public assistance called vendor payments where they will assume some of the costs that you may have toward your rent or house insurance, anything that does not contribute to an asset, it takes some of the burden off. Another advantage of being on the Ada Comstock Scholar Program is with the Works-Study Program being in Ada and also having to travel the 80 miles to school, what they suggested to me was to go out and find a job closer to home, to work something with a nonprofit agency or even a business that would coincide with what I wanted to do educationally and they would write up a contract which is what I have done and this is probably one of the best things that has happened to me in terms of my education. So that the parallel, I think they were talking about parallel working, this works out very well and most Ada's have this same advantage open to them.

I am new to the Ada Program, I do not know when it started, I think it was maybe 7 or 8 years ago, maybe even a little longer then that but they have had good success with women who have followed the program and we are now up to a group somewhere around 250 that will be doing this.

Mr. **ATKINS**. Now, is there a large counseling component to that program?

Ms. **RYAN**. Well, they have a separate office, it is almost like applying to a college independent of the college itself because they have one office that you are dealing with. There is Eleanor Rothman who is the director of the program and her assistant Ellen Leftcourt who do all the admissions work before you actually are accepted at the college or apply at the college. You go for a personal interview with one of the two women and they advise you about applying and assess your career goals.

Another advantage to the Ada Program is that you can do it at a pace that is reasonable for you and your family. It may take you a little longer then if you went to a different type university. For example, they usually recommend for a nontraditional coming in to take just two courses to get the feel of it but again this support is there. You also have the support of the other women because we have a house where commuters can go and sit and talk.

Mr. **ATKINS**. How important is that—would you assess that in terms of——

Ms. **RYAN**. Crucial. Crucial to succeeding, you get a chance to know that you are not the only one suffering either the problems with welfare or even what to do with the kids, just problems that you deal with on an everyday basis and it gives you the incentive to keep on trying. It is a very competitive school.

Mr. **ATKINS**. I thank you. That is very helpful, and I certainly am pleased to know of your success at Greenfield Community College and I am sure you will be successful as a Smithee as well in your career. It is good to see that this program is working. I wish some of the welfare department people the who fought us in establishing the ability of people to go to community colleges could see and recognize how important that has been for the recipients who want to become independent of AFDC.

Ms. **RYAN**. I think one of the biggest successes for the Ada Program is that it does organize you into a group even though you may not spend much time as—you know in meeting, you are organized.

Mr. **ATKINS**. But you know you have the support.

Ms. **RYAN**. You have something that is set up and designed to meet your needs.

Mr. **ATKINS**. I would like to ask you Mr. Barry, about the fundamental changes you detect in the shift from blind to needs-based admissions. You have been a guidance counselor now for how many years?

Mr. **BARRY**. Twelve years.

Mr. **ATKINS**. Say over the last 10 years, how much of a change has there been at the private colleges with blind admissions, how much of a difference this change has made for the students that you counsel?

Mr. **BARRY**. Well, as I said it is something that is just beginning in a sense of over the last 5 years. We have had up until approximately 5 years ago, we have colleges would routinely say that there is no question of need in the admissions process, that whatever you need we will provide if we deem you acceptable and I would say——

Mr. **Atkins**. If I could just interrupt here for a moment. So this is not an official policy that they have written down, it is through their communications with your office?

Mr. **Barry**. Right, right, and also with parents, you know we often invite admissions officers to our schools to talk with our parents and I would say the change began about 5—4 or 5 years ago where they would start to back off from that statement that financial aid does not affect your admissions decision with the idea that well when we are deciding on that last 100 or 200 applicants and so forth that if you do not need the money, we are more then likely to take—and this is something that I see and in my informal conversations with the admissions officers as a growing trend. And that they are looking in the admissions process at the financial need situation and it is effecting the decisions—it is beginning to.

Mr. **Atkins**. I see a fundamental change developing in American society. As short a time as 30 years ago they had the "Gold Coast" at Harvard where the school used to board people's polo ponies. Admission was strictly a question of money. No matter how dumb you were, within certain limits, if you had the money you could pick which prestigious school you attended. If you did not have the money, it was too bad. In the last 15 years this situation changed dramatically, but I think we are now sliding back to the old Gold Coast system of money talks.

We do not have any real quantification of how much this is changing, of how many people this reversal is affecting and what it is doing to segregate income groups. Right now, for instance, at the University of Lowell there is an incredibly competitive program. A lot of people turn down two and three more expensive private college admissions because Lowell has the program they want. It may be a plastics technology, a robotics program, or whatever. But I am afraid that as the financial situation continues to deteriorate we will have enormous pressures to expand public institutions just to give low- and middle-income people a higher education. There will be a subsequent degradation of the programs at public institutions such as Lowell University and at the same time a growing stratification between the quality of public and private programs.

Mr. **Barry**. Yeah, it is something, as I say, the signs are that it could begin anew and I think it is something we would want to avoid, definitely.

Mr. **Atkins**. Thank you.

Mr. **Ford**. Mr. Hayes.

Mr. **Hayes**. Ms. Ryan, your testimony is very moving. I want to personally express my admiration for your courage in continuing to press for your education. It is too bad, maybe we could live in hope that in the not too far distant future maybe testimony which you have given here may find its way to "60 Minutes" or "Face the Nation," these kind of programs and certainly if such should happen as you expressed yourself in your last paragraph, at the risk of being somewhat redundant, I would like to read it.

"For now what I hold onto is the belief that legislators such as yourself," and then I'll paraphrase that by saying, too few of us currently who are in this position would be really concerned about what you say at the moment. I firmly believe and I do not know if you have gone this far not to think this way. There are some in positions of power to do something about the current situation who already appear to me to have accepted the fact that there are expendables in our society and many could be categorized as nontraditional students, disadvantaged students who are absolutely not necessary if we proceed to follow a course of trying to secure our Nation. We think more in terms of spending $1½ billion for nerve gas so we can bury it than to educate our students. Well, I just wanted to say that I hope as you do that we can care enough about you, and your children, and others like you to implement legislation that will reconcile the inconsistencies between public assistance and financial aid programs, which I think is tied into the attachment which is a legal approach to try to solve the problem as it related to your Food Stamps Program when they took them away from you. I would like to see that because I think it is unfair, but saying that, I do not want you to hold out too much hope that the current legislators are really going to do anything about it unless there is almost 180 degree turn in some of their positions. I just wanted to say that.

Ms. RYAN. I think what is more important to me, I do not have any hope that that is going to be the resolution but I think it is real important that you do have control over it when you define programs like the college work study. I think the college work study is one of the most valuable programs to a nontraditional student in that it allows them not only to work for their education and gain experience so that when they go into the job market, they have got two steps ahead. Unfortunately, because it has not been termed very well one way or the other whether it is an income or whether it is a training-type allowance what it is, but that is where the biggest problems come into is that the definition of what college work study actually is supposed to be.

Mr. HAYES. I just at the risk of being categorized as being part of some, I would like to say, I just wish we had more people like Congressman Atkins and the chairman of our subcommittee here, Ford out of Michigan, I think the job would be a lot easier. Thank you.

Ms. RYAN. OK.

Mr. HAYES. Thank you, Mr. Chairman.

Mr. FORD. Thank you. Dr. Silber has been delayed but we understand he is on his way so we will take about a 10-minute break.

[Whereupon, a brief recess was taken.]

Mr. FORD. The next panel will be President John Silber of Boston University, Chancellor Joseph Duffey, University of Massachusetts, and John Duff, chancellor of the Massachusetts Board of Regents. Welcome, gentlemen, and the prepared statements that we have from you will be inserted in the record immediately preceding your comments and we will start first with Dr. Silber.

[The prepared statement of John R. Silber follows:]

PREPARED STATEMENT OF JOHN R. SILBER, PRESIDENT, BOSTON UNIVERSITY

Mr. Chairman, members of the Subcommittee on Postsecondary Education, I am grateful for the opportunity to testify before you today.

INTELLECTUAL CAPITAL FORMATION

In recent years, Americans have become increasingly aware of the need to build up the Nation's physical and financial capital. Through the efforts of the Reagan administration, the national debate on this issue has in large part shifted from the question of whether capital needs to be developed and maintained to the question of how best to do so.

We have not yet adequately recognized, however, that there is a third kind of capital—intellectual capital—which is as important as the other two kinds. In fact, the development of physical and financial capital depends upon it. Intellectual capital is fundamental to the wealth of nations in a way that physical capital is not. This can be seen in the example of Japan, a nation with next to nothing in natural resources, a country that is deficient even in arable land. By substituting intellectual capital for physical capital—substituting trained intelligence and its products for natural resources—Japan has built the second greatest industrial capacity in the world.

I emphasize the importance of trained intelligence, for in the Third World there are many desperately poor countries that are far richer in resources than Japan and whose people are on the average as intelligent. But these countries fail to convert the raw material of native intelligence into intellectual capital through education, and partially in consequence they languish in poverty and political oppression—which are often the harvest of ignorance. While education is no guarantee of political enlightenment, as the examples of Nazi Germany and the Soviet Union attest, the mechanisms of political control are more easily applied to populations in the thrall of ignorance. Japan, through its intense and pervasive programs of education, flourishes in prosperity and freedom, providing a spectacular example of the manner in which education can be liberating both to individuals and societies.

Despite this fact, calls are made for reductions in the amount spent on education and especially higher education.

INTELLECTUAL CONFUSION AND THE CRISIS IN EDUCATION

Higher education today, unfortunately, is bedevilled by a complex of intellectual confusions. If we properly understood the difference between investment and consumption, we would not now be facing calls for reductions in spending for education. For money spent on education is almost pure investment, designed to develop the essential and entirely renewable resource of human intelligence. Intelligence is the one resource we need not conserve but should use at the maximum rate, and the one resource that increases by use. Certainly there is waste in higher education which can and must be corrected; but the savings thus made ought to be redirected into further educational investment.

Our discussion of educational policy is further bedevilled by another confusion, by which our dual system of public higher education is mistakenly divided into two parts, usually called the "public sector"—that is, the institutions operated by the state—while the rest of the public system, the institutions operated by independently governed boards of trustees, is dismissed as private. In talking about public spending on higher education, we tend to see only the state sector, with its 1,500 institutions, as public. The 1,600 institutions in the independent sector are miscalled "private," and it is a common experience for presidents in this sector to be asked why the taxpayer should provide public funds for "private" education.

All too often, we act as if educational institutions do not exist unless they are operated by the state. In Massachusetts, there are periodic efforts to establish a state law school. It is frequently pointed out, as if it were an occasion for shame, that Massachusetts is the only state in the union without a state-operated school of law. There is no recognition that Massachusetts swarms with schools of law—some of them among the most distinguished in the nation—which have capacity to educate all the lawyers the Commonwealth needs.

It is possible to argue for the establishment of a Massachusetts state law school only on the bizarre assumption that there are no public schools of law in the state. And this assumption can be maintained only by the mistaken belief that the independent schools of law are not public but private. It is a fallacy that the institutions of the independent sector are "private." We educate only the children of the public: there is nobody else to educate. No one supposes that before the creation of the lang-grant colleges the public went totally uneducated? There was public higher education, and it was provided, as it still is today, in the independent sector.

Although it is common to claim that the independent sector ignores the people and is a bastion of privilege, while the state sector is the true university of the people, the facts dispel that claim. In 1979-80, the last year for which figures are available, in Massachusetts the median family income in the independent sector was $25,000 a year and in the state sector it was $20,000 a year. Both figures were well above the median. Moreover, the proportion of minority students in the two sectors is remarkably close. Nationally, for example, the independent sector of higher education now enrolls approximately 8.7 percent black students; despite the great advantages of a subsidized tuition, the state sector manages nationally only about 9.2 percent. It is generally the case in the independent sector that the better the school, the higher the minority enrollment. And this is no great mystery, because minority students generally need heavy financial aid, and schools with massive endowments can provide much more generous financial aid, competing effectively with the subsidized tuition of the state sector. So this disproportionate number of minority students in the independent sector happens to be enrolled in the very finest institutions in that sector: finest from the standpoint of academic quality and financial strength.

Finally, there is the familiar charge that education in the independent sector is costly. The short answer to this charge is that the state cannot buy goods and services any cheaper than the independent sector can: we get the same discounts that they can get. What we have is roughly equivalent quality for roughly equivalent cost. The common habit of speaking of "high-cost private colleges" reveals another confusion, that between price and cost. Tuition, the price that is charged students, is confused with the cost of education. Education in the independent sector bears a much higher price tag to the student or to his family, just as education in the state sector bears a much higher price tag to the taxpayer. The cost in both sectors is about the same.

THE COSTS OF CONFUSION

Massive waste in higher education results from these confusions. Massachusetts entered the 1960's without a state facility for training doctors. But we had in Boston three internationally distinguished medical institutions, those of Boston University, Harvard and Tufts. These three schools accepted more than enough qualified applicants from Massachusetts to meet twice Massachusetts' needs for doctors. Opportunity more than met social need. It was argued that tuition at these institutions was too high for some students, and rather than solving the problem by the inexpensive expedient of providing scholarships, it was proposed to build an expensive new medical school. At this time, Boston University, Harvard and Tufts informed key members of the legislature and the governor that we would increase our enrollment of Massachusetts students to educate more than the anticipated enrollment at the new medical school, with only a small subsidy from the state. This sensible offer was ignored.

Although the existing independent medical schools were already training more doctors than could find practices in the state, the legislature was persuaded to be embarrassed by the lack of a state school, and the state school was built.

The state medical school cost $125 million in capital construction: at least three times the cost of expanding the existing facilities at Harvard, Tuft, and Boston University. This capital expenditure, established as endowment, would have produced an annual income in perpetuity sufficient to educate without tuition charge all the students enrolled each year in the University of Massachusetts Medical School. In addition, the taxpayers of Massachusetts pay the operating costs of the state medical school. Last year these totalled approximately $21 million, or approximately $50,000 per student. Without considering capital costs the education of a student at the state school costs three times the average tuition charge in the three independent medical schools.

The establishment of this school is a monument to a policy of intentional redundancy—a policy that comes naturally to those who fail to recognize that public higher education has an independent no less than a state sector. Had cooperation rather than duplicative competition been the objective, far greater benefits in medical education would have been available to the residents of Massachusetts at less than one-third the cost to the taxpayers.

This is only one example of wasteful duplication in the state sector. At the same time it was building its medical school in Worcester, the state built a massive new campus in Boston harbor. This duplicated not only existing places in the independent sector, but places in an existing state college. The capital cost of this facility was $150 million. A decade after its founding, demand in Boston dropped to the point at which the Commonweath was forced to close Boston State College, an institution which provided education for local young people for nearly a century and a half. The capital cost of the harbor campus, if invested, would have provided, along with the annual operating budget of the University of Massachusetts/Boston, funds sufficient to provide three quarters tuition scholarships in the independent sector for each of the students educated at its redundant campus.

With the nearly simultaneous creation of the two small new schools, which could have been governed from the main campus, the University of Massachusetts became a "system," with expensive headquarters and the usual complement of administrators, all of them redundant and infringing upon the autonomy of the University's flagship campus at Amherst.

These stories are well-known in Massachusetts, but there is little evidence that the lesson has been learned. Despite the presence in Boston of a number of excellent independent college programs in nursing which are suffering declining enrollments, the state, instead of introducing an inexpensive scholarship program that will make those resources available, has initiated the process to create an expensive new program which will result in the closing of one or more of the high quality existing independent programs. And in a city with a number of distinguished engineering programs, the state proposes still more duplication.

Redundant expansion in the state sector hitherto has proceeded largely under the impetus of the philosophical confusions I have been describing. Federal higher education policy has generally been silent on the distinction between the two sectors and by providing Pell grants and Supplementary Education Opportunity grants, as well as the diverse system of subsidized and guaranteed loans, has in fact helped the independent sector in its unequal price competition with the state sector. But actual and proposed cuts in student financial aid will almost certainly result in the forced expansion of the state sector. These reductions will not deprive many students of an opportunity for higher education. But they almost certainly will have the effect of leading more students to seek places in the state sector. This migration will result from a price war, an activity which in private business occurs in only two situations: when a business seeking a monopoly illegally attempts to drive a rival into bankruptcy, or when a group of fierce competitors blunder into a war rather as Europe blundered into World War I. Neither model represents a tolerable blueprint for cost containment in higher education.

The administration's preference for leaving education as a responsibility of the states is well known. But it also has a preference of limiting government functions to those which cannot be provided by individuals or individuals organized into private institutions. The colleges and universities of the independent sector, although public in their constituency, are private in their organization. If students are provided with the means to pay independent sector tuition charges, these institutions can continue to educate some 20 percent of our students—33 percent of those earning baccalaureates, 63 percent of our lawyers, 40 percent of our physicians, and 36 percent of our Ph.D.s—at a far lower cost to the taxpayer than newly constructed and highly expensive institutions in the state sector.

THE TUITION ADVANCE FUND

If we are to avoid both mindless duplication of facilities and major new subsidies, we must find a means to support students in both sectors. A system which converted all federal grants into advances repayable on a practical schedule would be superior to a grant system, both in terms of public expenditure and educational principle. It would focus on supporting students, leaving to them the decision as to what kind of institution to attend, without coercing them into state institutions by leaving the price of independent ones beyond their reach.

I have proposed a comprehensive system of federal funding for higher education—The Tuition Advance Fund—which would provide educational opportunity—both in access and in choice--more equally and more extensively than anything dreamed of by the Democrats and which will increase self-reliance and, within a few years, reduce the federal role in higher education more drastically than anything proposed by the Republicans. It would, in the process of achieving these goals, also prevent a new round of unneeded expansion in the state sector and an inevitable round of bankruptcies in the independent.

Under the Tuition Advance Fund, any undergraduate degree-candidate in an accredited institution could be advanced money to pay for tuition, to a limit of perhaps $7,000 a year for four years. After graduation, students would repay their advances through a new payroll withholding tax, administered by the IRS, on a sliding scale that might reach 6 percent of gross income at maximum. There would be no repayment on incomes below a certain level, perhaps of $10,000 a year. This repayment would continue until one-and-on-half times the advance has been repaid. This excess of repayment over advance would insure the Fund against the unemployment, disability, and early death of some of those who had gotten advances. Repayment of one-and-one-half times the advance would still be a bargain for the recipient, for the financial benefit that proceeds from having attended college will, on the average, exceed the total repayment obligation by twenty-five times. In 1977 the Bureau of the Census estimated that the average college graduate earned over a lifetime $232,000 more than the average high school graduate. That is approximately $400,000 in 1984 dollars. The maximum TAF repayment obligation—advance plus surcharge—would be about 12 percent of this lifetime enhancement of income. The average TAF repayment obligation would be no more than 4 percent.

It is sometimes argued that TAF would provide a windfall for the very rich by allowing them to take out advances at low interest and invest the proceeds at the market. This is fallacious: a student with a very high annual income would be obligated to repay at a rate that would impose an effective interest charge well above the market rate. The only windfall, if it could be called that, would be for a student who completed four years of college and then never made an income above the poverty level. Such a student, having received no economic benefit from attending college, would make no repayment for the advance.

When two persons with TAF repayment obligations marry, if both have income, repayment proceeds precisely as if made by two unrelated individuals. However, if only one spouse has income, repayment begins at an income level of $15,000 and is made for both at a rate that is 75 percent of their combined obligation. That is, if family income would require repayment by one individual at 2 percent, repayment would be at 75 percent of 4 percent, or 3 percent.

In fifteen to twenty years, repayments to the Fund and its investment income would reach a level sufficient to meet future claims against it. The Fund would then become self-supporting and constitute a vast national endowment for the education of college and university students. In ten to twenty years more, every cent originally appropriated to the Fund out of tax revenues could be returned to the federal government! This would be a national first. It would also provide a multi-billion dollar endowment for the development in perpetuity of the nation's intellectual capital.

The administration of the program would be simplicity itself. A student admitted to degree candidacy at an accredited college or university would be issued an account under his social security number. He would pay his tuition—or most of it—simply by presenting his account number to his bursar, who would bill the Fund. After graduation, when he was employed and filled out his W-4 form, he would check a box marked that he had an outstanding obligation to the Tuition Advance Fund. His employer would then deduct from his salary at the appropriate rate and remit the TAF payment to the Treasury along with income and social security tax withholdings. Analogous procedures would cover the self-employed.

I need hardly point out the advantages of such a system. The present system for needs assessment is complicated, cumbersome, expensive, and highly ineffective: the Department of Education has estimated that 35 percent of the parental income statements contain some elements of deception or fraud. There is also a serious problem caused by the existence of the bogus "independent" student, who says "Yes, my father does make $200,000 a year, but that's not relevant to my situation; he has cut me off without a penny." Sometimes such claims are true, and should be taken into consideration by an equitable system of financial aid; usually, however, they are false, made merely to get around an inconvenient income ceiling. There is no evidence, for example, of a wave of disinheritance sweeping Fairfield County, Connecticut. Even when there is no element of fraud, a thoroughly equitable system of financial aid would require an invasion of family and individual privacy that no university and no office of education is qualified to make, or could make under the Constitution.

TAF solves these problems—sparing the Department of Education millions of dollars spent in fulfilling its obligation to provide answers to unnecessary questions—by a dramatic revision of the concept of need: it deals with the student as an individual, rather than as a member of a family.

The great majority of students, taken as individuals, are close to indigency. Their need as students is roughly equal to their educational expenses. It makes much better sense to consider them all as paupers for the moment and then exact repayment at a rate automatically indexed to their individual prosperity in later life.

But even if we consider them as members of a family, the fact is that 95 percent of the families in America need some help to see one child through college and substantial help to see more than one through college at the same time. 5 percent of the families may not. Should we deny a rational system of aid to the 95 percent simply because it may benefit the 5 percent?

In a parallel case, that of the public highways, we decided to dispense with a needs test. We do not ask for a 1040 form from someone who wants to drive on an Interstate highway because we recognize that relatively few people can afford helicopters or their own private roads. Similar principles ought to cover the provision of guaranteed-repayment advances for college tuition.

The Tuition Advance Fund likewise offers major advantages in collection. The present system is no better at collection than at needs assessment.

Default on Guaranteed Student Loans has been running about 11 percent across the board and above 25 percent in some institutions; the government has already paid $2.5 billion in defaulted loans, a sum whch is about equal to the 1982 loss from all burglaries. This is a scandal. At least as important as the financial cost of the default is the moral cost, as hundreds of thousands of young people are encouraged or at least permitted to begin adult life with a massive renunciation of responsibility in which bankruptcy and default become a secular rite of passage.

The Tuition Advance Fund would solve this problem at a stroke: collections would be managed by the highly efficient methods of the Internal Revenue Service. This would have persons having an obligation to repay with only three means of defaulting: through unemployment; through death; and through Leavenworth. None is especially attractive. Bankruptcy would not be an option, for TAF does not establish a conventional debt, but rather an obligation to pay a special tax at specified rates until a specified total has been paid. Bankruptcy might wipe away all debts, but as long as there were income, there would still be an obligation to continue paying the TAF tax until full repayment, retirement, or death supervened. To judge from the record of the GSL program, debt repayment is less than certain; but tax payment under the IRS code continues to run death a close second for certainty.

To establish this endowment fully funded for all undergraduates would cost approximately $13 billion a year in 1984 dollars. Approximately $5 billion would go to students in state-supported institutions, and about $8 billion to students in independent institutions. Increasingly administrators of state institutions are going to face the problem of either having to increase their tuition or of having to reduce the quality of their institutions. The need for the Tuition Advance Fund is going to intensify in the state sector just as it has in the independent sector. The benefits are there for both. Approximately $7 billion of the $13 billion total could be funded from programs that TAF would replace: the Pell grants, the Supplementary Equal Opportunity Grants, the State Student Incentive Grants, and the National Direct Student Loans and Guaranteed Student Loans (except or post-baccalaureate students). The existing College Work-Study program, with its emphasis on self-reliance, is thoroughly consistent with the spirit of TAF and ought to be retained. The remainder of $6 billion can be put into perspective by remembering that it is less than 1 percent of the operating budget of the federal government, and less than one-quarter of 1 percent of the Gross National Product.

In discussing the financing of TAF, I realize the anomaly of talking about the need of an increase of $6 billion to the federal budget at a time when we are meeting on the subject of cost containment. But cost containment in the context of the university is a relatively insignificant matter compared with the obligation to achieve cost containment in the federal government. There are in fact many ways by which we could fund the $6 billion without increasing the overall budget. The Congress could meet this objective in a variety of ways and, as members of the Congress, you will be in a better position than I to judge which of these alternatives might be the most feasible. We could achieve reductions well in excess of $6 billion, and with increasing cuts for each subsequent year, by putting an end to indexing of payments from the federal government, except COLAs for those who have already retired under social security. We could make substantial cuts by the reinstitution of the draft, which would save billions of dollars initially in reduced personnel costs and increasing billions of dollars in the years ahead by a reduction in retirement costs. Substantial savings could be made not only in the federal budget but in state and local government budgets by limiting retirement benefits to one tax supported system, thereby ending the possibility of a person retiring as an employee of the federal government, as a member of the armed forces, on social security, and perhaps as an employee of a city or a state.

There are many other ways as well by which $6 billion could be saved: The important factor to bear in mind is this: any cut of $6 billion that will preserve the opportuntiy of spending $6 billion for the Tuition Advance Fund will be the most important cut to be made, because TAF is an investment in the future of our economic productivity. In the long run, the future of our country and the future of national defense depend upon our maintaining a vigorous, strong economy. And the strength of our economy derives primarily from human resources developed through education. We receive the greatest economic return from the investment we make in education. And consequently, in the long run, the investment in education will result in the greatest cost containment and cost benefits for our entire nation.

Funding for TAF should also be considered in light of the fact that it is unlike every other federal appropriation, because it would have a clear and visible sunset ahead of it: within a generation, the total of repayments into the Fund and its investment income would more than equal the advances paid out, and the Fund would no longer require tax support. Because of the complexities of such variables as inflation, it is not possible to be certain precisely how many years the Fund would become self-sustaining. But we can say with great certainty that self-funding would be attained within fifteen to twenty years. Moreover, after a further period, the Fund would attain a surplus that would allow it to repay to the federal government all the original funding.

In this respect TAF would likewise be unique in the history of federal approriations. In twenty years or less the program would end the federal role in financing student aid. At the same time that it provides parents and students with more generous aid to higher education than any Democrat has proposed or could hope to see enacted, the Fund provides for a higher percentage of repayment, greater individual self-reliance, and a greater reduction in federal aid to higher education than any Republican has proposed or could hope for. The Tuition Advance Fund is a perfectly responsible way of funding higher education because those who receive the educational benefit in advance will pay for it during their working lifetime through payroll deductions.

The demographics and hence the economics of the Tuition Advance Fund invert those of Social Security: a rapidly increasing number of repayers against a decreasing or very slowly rising number of recipients guarantees its financial integrity. It is like a college whose enrollment remains roughly constant but whose alumni—all of whom have signed contracts to repay most of the cost of their education—increase annually.

While meeting the educational goals of the Congress, TAF would be fully consistent with Mr. Reagan's supply-side economics, for it is an investment in capital formation rather than a program of consumption.

The present federal system for financial aid was put together in patches during a period when higher education was expanding and perpetually increasing federal spending was the custom, an widely considered a desirable one. Higher education now faces a new and different reality. The pool from which it draws its students has begun to shrink, and President Reagan has massive national support to put federal spending under firm control. Higher education ought to get its house in order by supporting a comprehensive reform of federal financial aid that promises long-term reductions in federal spending.

Under the funding mechanism proposed for TAF, spending on higher education becomes investment rather than consumption. This is the high ground from which higher education can repond to inevitable budget cuts The Tuition Advance Fund offers a guaranteed phase-out of a major part of the education budget while preserving and indeed enhancing our ability to provide higher education to every qualified student.

Until federal deficits are brought under better control, realism compels us to the conclusion that a program calling for increased spending for higher education—even a temporary and self-cancelling increase such as TAF—has only a limited change for enactment. But the case for TAF can be made, even at this time, as essential to our nation's economic well-being on which our national defense ultimately depends. And enactment of the Tuition Advance Fund now with a concomitant reduction of $6 billion elsewhere in the budget will provide an immediate and substantial stimulus to our economy, analogous to a tax cut. It will remove a heavy, almost unbearable burden from the backs of parents and place an easily manageable one on the shoulders of each student.

As long as a substantial part of the tuition charge in the state sector is paid by outright federal grants, market forces in higher education are attenuated. If students were spending not federal tax dollars or massive subsidies from their parents, but an increased portion of their future earnings, we should expect them to become more careful consumers, opting for quality and providing a market stimulus for excellence. And if there is any level of extravagance in the operation of colleges and universities, we would expect student-generated market forces to demand its reduction and place severe market limits on tuition increases.

Such a comprehensive and rationally structured program of financial aid would give us our best hope for responsible cost containment in our dual system of public higher education.

COST CONTAINMENT IN HIGHER EDUCATION: THE TRUE DIMENSION OF THE PROBLEM

I want to conclude by addressing the issue of cost containment as it is generally understood. Each year when the nation's colleges and schools announce their new tuition rates, it is widely observed that the increases run ahead of inflation—that is, they are higher than the current rate of increase in the Consumer Price Index (CPI). It seems almost universally assumed thta something is wrong here, and that any increase in tuition exceeding the CPI represents illicit self-enrichment by colleges and universities. Hence the increasing talk of "cost containment" in higher education and this panel today.

It is well-known within higher education, but not, on the evidence, outside it, that the CPI is a highly inappropriate yardstick for measuring the price of higher educations.

This is largely because a college's purchases are not congruent with the mixture of items used to calculate the CPI. The principal item purchased by colleges and universities is labor. Currently, 52 percent of Boston University's budget is payroll costs. Now, it is in the nature of personnel costs that if the real income of the nation is to increase, wages and salaries must run ahead of general inflation. This plain fact is exacerbated for colleges and universities because during the 1970s faculty salaries lagged badly behind inflation, and if we are to remain competitive in the labor market, we must now catch up.

Moreover, many of our faculty, expecially in the sciences, technology, and management, now have options for employment in industry at high salaries. They have established a substantially higher market value for their services and we must meet that market or resign ourselves to employing the second-rate.

Urban colleges and universities are also heavy purchasers of another item that has risen well beyond the CPI: property for renovation and conversion. For example, Boston University is still in the process of completing its campus through the purchase of buildings contiguous to its own. Twenty years ago, we could buy a building for $10,000 that now costs $250,000. About a third of this increase is explained by the CPI; the remainder must appear in our tuition charge whether the CPI explains it or not. Since 1967, the real price of heating oil has gone up by about 10 percent—that is, 10 percent ahead of the CPI. Colleges and universities outside the sunbelt consume prodigious quantities of fuel oil.

Moreover, it is in the nature of higher education that our principal activity, once the invention of the book is taken into account, is not susceptible of much improvement through technology. Education must carried on by the traditional devices of lectures, seminars, conferences and laboratory sessions. In many areas of higher education, there are no technological breakthroughs of which to take advantage: surgery must be taught largely one-on-one, as must music and laboratory technique. The teaching of writing cannot be mechanized, for here to if the skill is to be taught it must be through a master-apprentice relationship. While there are limited possibilities for the responsible use of educational television, most of these have been utilized. Computers, often heralded as devices for cost-cutting, are in fact devices to increase capacity for work. It is in the nature of a computer to suggest ten new jobs that can be done for every job that it eliminates.

Moreover, in many areas the cost of equipment has gone up exponentially, not because we are buying the same things at higher prices, but because we must buy new and immensely more expensive things. Science and engineering education become more and more machine-intensive. Mult-million dollar CAD/CAM computer installations succeed the slide rule and the paper pad. These changes, essential to the preservation and enhancement of our national economy, make higher education more expensive beyond the CPI rate of inflation. Frequently the new equipment must be housed in sophisticated structures costing twice as much per square foot as conventional classroom buildings. Thus we must upgrade our building stock, replacing the inexpensive and obsolete with the up-to-date and costly.

Private businesses have very substantial room to manoeuvre in the face of inflation and changing market conditions. At the extreme, they can migrate from unprofitable businesses into profitable ones, as General Dynamics is about to do in the case of its Quincy shipyard. Colleges and universities, however, have limited room for change, and anomalous rises in costs are bound to drive tuition ahead of the CPI.

Finally, the tuition charge reflects only part of the funding of higher education. It is no where written that the non-tuition income of a college must increase by as much as the rate of inflation. Currently, for example, federal insitutional funding is beginning to decline. But this fact in no way exempts us from the effects of inflation on that portion of our expenses covered from federal sources.

No one doubts, Mr. Chairman, that higher education ought to be provided in the most efficient manner possible. I know that at Boston University economic efficiency has been one of our highest priorities for the past fifteen years. And still our tuition must increase faster than the CPI.

The problem of cost-containment in higher education is not going to be solved by the comparatively modest improvements still to be gained by increased efficiency. That is not even the problem. The problem is to contain a new and explosive round of spending on higher education that will follow if reductions in federal student aid force new and extraordinarily wasteful expansion in the state sector.

There is an iceberg one point off our starboard bow. Although a good deal of intellectual fog of the sort I have been discussing has thus far shielded us from the grim reality that we inexorably approach, the Congress can, with the help if some elementary radar, change course and prevent the disaster. If we convert our existing patchwork program of financial aid to a rational and comprehensive system such as that embodied in the Tuition Advance Fund, higher education may yet escape the fate of a dark night in April in the north Atlantic. Our system of higher education is so large and complex as to merit the adjective "Titanic." It will be tragic if we make policy decisions that make the comparison more exact.

STATEMENT OF JOHN SILBER, PRESIDENT, BOSTON UNIVERSITY

Dr. **Silber**. Mr. Chairman, members of the Subcommittee on Postsecondary Education, I am very pleased to have this opportunity to address this question of cost containment and I think it is very important that cost containment be understood in its broadest context. A cost containment involves not only how you reduce the budget in specific years but how you bring the greatest productivity and the greatest generation of wealth at the same time that you do it in the most economic means.

Now intellectual capital formation is the type of capital formation that is by far the most important. Japan demonstrates by itself that intellectual capital formation transcends in importance financial capital and natural capital such as capital goods and capital resources. There is Japan with only 16 percent of its islands arable in arable lands and all four islands together about the size of California and it is now the second most powerful industrial producer in the world and they have done this by the opportunity afforded them following the second World War when they were bankrupt to educate their people and to coordinate that education toward effective economic productivity.

This capital formation is the best means of cost containment by reducing costs to proportions that are easily manageable. Now, in our country we have not placed this kind of emphasis on intellectual capital formation. We have had a hodge-podge of legislation that has been developed toward the support of higher education but now at a time when we need higher education more then ever before, at a time when our productivity has become so heavily industrialized that highly sophisticated, intellectually oriented men and women are needed in order to make this effective economically, we are talking about cut backs in higher education and that is going to be the most expensive course this Nation can follow. This is no time to cut back on the well springs of economic security, economic well being on which our national defense and national security depends.

One of the reasons why we waste money in higher education however is due to a series of confusions that exist in this area. And now I am shifting from that general point about the importance of supporting higher education to a discussion of examples of waste.

There is no greater example of waste in the United States as higher education then the mindless duplication of facilities in the State sector where facilities have existed in the independent sector and the failure to see that the right way to expand educational opportunity and educational facilities is through scholarship programs or grant programs directed to students themselves who can carry those grants to the institutions that are necessary.

Massachusetts perhaps leads the Nation in the example of the folly of supposing that public higher education includes only State supported sector and that independent education somehow is private and not a part of the public sector at all. We have seen this in the recurrent demand in our State to start a law school as if we had no law schools. We have 11 law schools in the State of Massachusetts and they educate about three times as many lawyers as any State needs and almost enough lawyers to supply the Nation. At the same time people complain that we have no law schools meaning simply that we do not have any law school that is thus far supported by the State but if the State wanted to subsidize more students to become lawyers although we have many more than we need, all they would have to do is to establish an inexpensive scholarship program and use anyone of the very distinguished schools that already exist. We have the same problem coming up now, the schools of nursing. We have distinguished schools of nursing already in existence and flourishing in Massachusetts, in Boston, most of them in the independent sector and now there is talk at the same time that undergraduate enrollment in nursing are declining, of creating a brand new State nursing school. If that is done, Boston University will have to close down its nursing school for simple lack of enrollment. What we need in nursing which is not a well paid profession are scholarships to subsidize the students who have the dedication to enter this noble profession, but the last thing we need is a wasteful expenditure of new moneys on facilities and on faculties to produce a brand new school in the State sector that duplicates far better programs already in existence in the independent sectors and I could elaborate more of those example in Massachusetts but I will not.

Now, that conclusion, that failure to recognize that public higher education consists of two sectors the independent and the State sector is one of the most expensive confusions that bedevils this Nation and it must be overcome if we are to have significant cost containment because that is where the largest part, the literally tens and hundreds of millions of dollars of waste occurs. It is in that redundant expansion of a State sector rather then an intelligent expansion either in the independent or the State sectors, whichever serves the national interest or the State interest most effectively and the reliance on support to students to enable them to avail themselves of the fine programs that are already in existence and thereby set a market pressure for quality and a market pressure for cost containment in those particular institutions.

Now I believe that the best way for us in the long run to reduce the cost to the Federal Government of the support of education and to do the most possible to enhance educational opportunity in this Nation is to adopt what I have described as a comprehensive program of funding for higher education, the tuition advance fund, which would provide educational opportunity both in access and choice more equally and more extensively then anything dreamed of by the democrats and which will increase self reliance and within a few years reduce the Federal role in higher education more drastically then anything that has been proposed by the Republicans. It would in the process of achieving these goals also prevent a round of unneeded expansion in the State sector and an inevitable round of bankruptcies in the independent one.

Under the tuition advance fund, any degree candidate in an accredited college or university would find an advance to help pay for tuition up to a limit of perhaps $7,000 a year for 4 years, and following graduation, the student would be obligated to repay his advance through a new payroll with holding tax administered by IRS on a sliding scale that might move from about 2 to 6 percent of gross income at maximum. There would be no repayment for incomes below a certain level, perhaps $10,000 a year or $15,000 for married couples and this repayment would continue until one and one-half times the advance had been received. Now that payment of the surcharge or the excess repayment over the advance would insure the fund against unemployment, disability and early death of some of those who got the advances. Repayment of one and one-half times the advance would still be a bargain for the recipient, for the financial benefit of the proceeds of attending college does on the average exceed the total repayment obligation by about 25 times.

Now, it is sometimes argued that the tuition advance fund would offer a wind fall to the very rich by allowing them to take the advances and then use the money instead of borrowing it from the bank, but as a matter of fact, that surcharge again serves to insure that if the rich avail themselves of this, they will pay higher then the market rate in the effective equivalent interest involved on that advance.

In 14 to 20 years the repayments to the fund on this investment would reach a level sufficient to meet further claims against it, and at that point, the further payment would begin to return to the Federal Government the value of the advance that was made in the first place and thus, in a period of about a little more then a generation, what we would have is a repayment to the Federal Government of the entire total of the advance, and we would establish a national endowment for the education of our undergraduates in this country that would insure the enhancement of intellectual capital in this Nation and the ability of this Nation to compete successfully in the high technological games that we are now facing internationally.

I hardly need point out the advantages of such a system. At the present time, we have the most cumbersome, byzantine method of assessment of financial need that one can imagine. We spend millions of dollars each year and countless hours of time by public officials and by private individuals to try to find out who actually needs money. Now, we do not know how to do it very well, and the point is that virtually everyone, the children of almost every family in this country, at least 95 percent of them, need some help in financing their education. Certainly that is always the case of families with more then two children in college at the same time.

Fewer then 9 percent of the American families earn as a family with no matter how many people are working, more then $50,000 a year which is about $35,000 after taxes and that is—if a person earns that much he now reaches the 91st percentile in our Nation. That means that over 95 percent of our families have a financial problem in financing higher education, and we ought to write law with a 95 percent in mind and not with the 5 percent in mind; we do not build Federal highways with any concern about how much is earned income of the individuals that use it. If you enter the turnpike you do not have to show your 1040 form and if you are making over $50,000 a year they say, "Well, use your own helicopter or use your own private road. We recognize that there are some people who can afford to make their own way by private planes or by helicopters. When we let them use the public highways on the grounds that they paid taxes, well, this same comprehensive way is the way to handle higher education, to recognize that the need of 95 percent of the American people is enough.

Now, it is not a giveaway when we transfer this intolerable burden from the shoulders of the parents to the backs of the students in a way that is so easy that the burden is quite easily carried. It is no disadvantage to a minority student or to a child from a very poor family, because repayment is a function of earned income. Those who do not make anything do not have to pay anything and it solves the problem that the Congress has not been successful in solving and that is, what do you do with the so called independent student. We have children applying to us from Fairfield County, CT, saying, "I am an independent student, my father makes $200,000 a year but he has cut me off without a penny." Unless we had Gestapo powers we could not check the truth of that statement, but as a matter of fact, there is no wave of disinheritance sweeping Fairfield County so we know that many of those claims are fraudulent. Indeed, I think the Office of Education has estimated that perhaps as much as 30 to 35 percent of the claims made under the need assessment system now in place are either fraudulent or at least misleading. It is time to change that and the tuition-advance fund would wipe all of that machinery away. We would treat every individual student as an individual and say he may be a pauper now but he is going to be better off later on, so we will advance him the funds necessary for his education and we will insure by the system of collection through the IRS that we collect, there would be no provision of default in this arrangement, the only way to avoid payment would be death, disability, or Leavenworth and none of those are attractive alternatives.

With this system in place we would have a means of creating genuine educational opportunity both in terms of access and choice and that is what is necessary to insure the health of higher education and we would reduce any pressure to force students by economic advance and by cost cutting or price cutting from the independent sector into the State sector and here we must disabuse ourselves of another fundamental conceptual confusion and that is the confusion between price and cost. It is not the case that independent higher education is more costly then State education. It is not the case that education in a State school is less expensive then education in an independent school. The fact is the price for the student and his family is much higher in an independent school then it is in a State school but the price tag to the taxpayer is vastly higher in the State school then it is in the independent school but on the basis of cost, institutions in both sectors are for the most part remarkably efficient and remarkably effective in cutting their costs and so our answer is not there but our answer is not to be confused about where expenses lie.

Now, if we are going to accept a differential in price, it still puts an advantage with the State sector under the tuition advance fund in that students must accept a much larger advance to attend the independent sector and they must pay a larger amount but if they believe that institutions in that sector have an advantage useful to them then that is an option they can take and that produces a market force for quality in all of higher education and has students and it has faculties and institutions competing with one another for the best student on the basis of offering their best quality programs at the lowest price that is consistent with their survival.

The tuition advance fund has the advantage also over Social Security in that the demography is working for it instead of against it, we have an increasingly rising number of persons who are repaying the fund while we have only a declining or a more or less stable number who are accepting the advances and that is a great advantage in terms of insuring its financial success and that is one of the reasons why the model of that program demonstrates that it will pay off and become self sufficient in a very few years.

This would be a unique program in that it would have a guaranteed phase out of a major part of the Federal budget if it were put through. Now there is no getting around the fact that the tuition advance fund would cost something and there is simply no way to avoid that. We would estimate that the cost of this program would be approximately $13 billion.

Approximately 5 billion would go to the students registered in the State institutions and about $8 billion would go to students in the independent sector.

Now approximately $7 billion of the $3 billion could be funded from programs that TAF would replace. If the TAF Program were in effect where every student had the funds necessary to attend the college of his choice and he did not have to repay those funds unless he had an income in excess of $10,000 a year and he only repaid at a percentage of his gross income on a sliding scale from 2 to lets say 6 percent over his working lifetime, there would be no student who would be barred financially from attending the school of his choice. At the same time then we could replace the Pell Grants, the supplementary equal opportunity grants, the State student incentive grants and the national direct student loans and guaranteed student loans except for post baccalaureate education for professional schools and graduate schools. The existing college work study program with its emphasis on self reliance and its educational component is thoroughly consistent with the spirit of TAF and in my opinion it should be retained. The remainder of the 6 billion can be put in perspective by remembering that it is less then 1 percent of the operating budget of the Federal Government and about a quarter of 1 percent of our gross national product.

Now, in discussing the financing with TAF, I am realistic enough to know that there is no point in talking about an increase of $6 billion to the Federal budget at a time when we are having a meeting on cost containment without saying how cost containment can be effective. But cost containment in the context of higher education is a relatively insignificant matter compared with the obligation to achieve this cost containment in the Federal Government. There are in fact many ways in which we could fund a $6 billion decrease or a $6 billion to spend on TAF without increasing the overall budget. Now the Congress could meet this objective in a variety of ways and as Members of Congress you undoubtedly are in a better position then I to judge which of the alternatives I should like to enumerate are most feasible. We could achieve the reductions well in excess of $6 billion with increasing cuts for each and with increasing reductions for each subsequent year by putting an end to indexing of all payments from the Federal Government except those COLA's for persons who are already retired under Social Security and if we do not put an end to this kind of indexing in COLA's, this country is going to go bankrupt.

We could make substantial cuts by the reinstitution of the draft. If we are not going to compensate all the young men and women who fought in the Second World War for their services at $90 a month, there is no reason why the coming generations of Americans should expect to be paid as professionals for their military service. We could make substantial cuts by the reinstitution of the draft which would save billions of dollars initially and reduce personnel costs and massively more billions of dollars in the years ahead by reduction in retirement cost with no decrease in the effectiveness of our national defense.

Substantial savings could be made by limiting retirement benefits to one tax-supported system thereby ending the possibility of the person retiring as an employee of the Federal Government, as a member of the Armed Forces, or on Social Security, and perhaps as an employee of a city or State. There are many other ways by which $6 billion could be saved. The important factor to bear in mind is this, any cut of $6 billion that would preserve the opportunity of spending $6 billion for the tuition advance fund will be the most important cut to make because the tuition advance fund will itself phase out within a generation. It is an investment in the future of our economic productivity.

In the long run, the future of our country and the future of national defense depend upon our maintaining a vigorous strong economy and the strength of our economy is more profoundly affected by the quality of higher education we offer than by any other single factor. We achieve the greatest economic return from an investment we make in education and in the long run this investment will have the greatest results and cost obtainments and cost benefits for the entire Nation.

Now, in concluding, I want to address in more conventional terms the issue of cost containment as it is generally understood. Each year when we announce our new tuition rates colleges and schools usually have rates that run ahead of inflation and they are criticized for it. Now that is our increases in tuition are higher than the current increase in the Consumer Price Index. It seems almost universally assumed by the public that something is wrong when this happens and that increase in tuition exceeding the CPI represents some form of illicit agrandizement or enrichment by colleges and universities and, hence, we have increasing talk of the cost containment in higher education and the subject of this panel today.

It is well known within higher education but on the base of the evidence I doubt that it is well known outside it that the CPI is a highly inappropriate yardstick for measuring the costs or the price of higher education. This is largely because college purchases are not congruent with that mixture of items that is used in calculating the CPI. The principal item purchased by colleges and universities is labor. Currently, at Boston University, 52 percent of our budget is payroll and that is not an unusual figure, I think that is pretty close to standard. It is in the nature of personnel costs that if real income of the Nation is to increase the wages and salary have to run ahead of general inflation. This plain fact is exacerbated for colleges and universities because during the 1970's our faculty salaries lagged well behind inflation and if we are to remain competitive in the labor market we must now catch up.

Moreover, many of our faculty, especially in fields like economics, mathematics, the sciences, engineering, technology, and management, now today enjoy options in industry, and in business, and in finance that they never had before. There was a time when academics had no means of making a living outside of teaching. That was the old adage, "if you cannot do something, well then you teach" and that used to have some truth to it in terms of the economic value of such persons. Today that is no longer the case; the members of our faculty can make far more money in most cases outside in business and finance then they can within the universities and, consequently, if we are to retain a first-class faculty we simply have to raise the salaries of our faculty to market rates. We have seen that for a long time in medicine, and in law, and now we are seeing it increasingly in all of the areas of science, engineering, and economics, and management.

Moreover, it is in the nature of higher education that our principal activity once the invention of the book had been achieved is not susceptible to any great improvement through technology. Education must be carried on by traditional devices of lectures, seminars, conferences, and laboratory sessions. In many areas of higher education there simply are no technological breakthroughs on which to take advantage. Surgery has to be taught with the surgical student and the surgeon. We teach violin by having one violin teacher and one violin student. Laboratory technique is learned by the individual student watching the teacher handle the microscope, handle the more sophisticated elements—instruments of the modern laboratory. Even teaching riding cannot be mechanized because hereto it is a skill that is learned in that master-apprentice relationship that is inherently expensive.

Now, there are limited opportunities for educational television but most of those have already been utilized and computers which are often mistakenly heralded as advices for cost cutting are in fact devices that inevitably increase the opportunities for new work, the capacities for new work and one discovers very quickly that that new work needs to be done. It is in the nature of the computer to suggest about 10 new jobs for every job that it eliminates. Moreover, in many cases, the cost of equipment has gone up exponentially, and because we are buying the same things at higher prices which would be run by the CPI, it is because we have substituted many new and vastly more complex instruments for our old ones. Science and engineering education becomes more and more machine intensive. Multimillion-dollar CAD/CAM computer installations have succeeded the slide rule and the paper pad and no one needs to elaborate the difference in the cost of the two. These changes which are essential to the preservation and enhancement of our national economy make higher education vastly more expensive then would be indicated by the Consumer Price Index.

Frequently, the new equipment must be housed in an entirely different kind of structure. If we want to buy a computer, we cannot put a computer in an ordinary building which you could build for about $70 a square foot. We have to put in a building that is protected against vibration, sound, dust, that is environmentally controlled, a building that, in short, costs about twice as much as a perfectly ordinary classroom would cost and this is not only through computer facilities, it is true of most scientific laboratories.

We then have to upgrade our building stock. We know that there is about a $50 billion backlog in science and engineering construction that is needed in our universities and colleges because of sheer obsolescence and the replacement of all that infrastructure which would cost millions of dollars cannot be handled at an increase that is commensurate with the CPI, rather it is going to be an increase commensurate with the enhanced technology and complexity.

And, finally, the tuition charge reflects only a small part of funding higher education and it is no where written that the nontuition income of the university has to increase as fast as the CPI. There is talk right now and there has actually been some cutting in Federal funding to universities. If it does not increase at the rate of the Consumer Price Index it is quite clear that our tuition is going to have to increase higher then a Consumer Price Index to offset the loss that we have from other sources of income.

Now no one doubts, Mr. Chairman, that higher education ought to be provided in the most efficient means possible and I know at Boston University and University of Massachusetts, economic efficiency has always been some of our highest priorities over the past 25, 30 years and still our tuition must and will continue to increase faster then the CPI. The problem of cost containment in higher education is not going to be solved by the comparatively modest improvement still to be gained by increased efficiency, by having secretaries work with new equipment, or by having professors teach an extra class, or one of those nostrums that are frequently handed out. That is not even the problem. All we have to do to lose our most distinguished faculty is to give them a four course, or some courses, a three-course teaching load and they will say bye-bye and be back to industry where they can do their research without the interruption of that much teaching. But we can combine their cutting edge knowledge of research and two courses of teaching quite effectively and maintain their presence in the academic community greatly to the advantage of the Nation, no less then at the university.

The problem is—so I do not think that kind of cost cutting is the problem. The problem is how to avoid new and explosively massive expenditure in higher education that is going to follow if reductions of the Federal student aid force students out of the independent sector into the State sector and thereby force new and extraordinarily wasteful duplication of facilities in that fashion.

In my opinion there is an iceberg about one point off our starboard bow, and although a good deal of intellectual thought of the sort that I have been discussing has thus far shielded us from the grim reality that we inexorably approach, the Congress can with the help of some elementary radar change course and prevent this disaster. If we convert our existing tax work program of financial aid into a rational and comprehensive system such as that embodied in the tuition advance fund, higher education may yet escape that fate of a dark night in April in the North Atlantic, our system of higher education is so large and so complex as to merit the adjective titanic and it will be tragic if we make policy decisions that make that comparison even more exact.

Thank you, Mr. Chairman.

Mr. FORD. Thank you, Joe Duffey.

STATEMENT OF JOSEPH DUFFEY, CHANCELLOR, UNIVERSITY OF MASSACHUSETTS

Dr. DUFFEY. We welcome you to the Commonwealth, Mr. Chairman. I had some worry that my friend Chester Atkins would fall into the wrong company when he went to Washington, not too much because I thought his instincts were pretty good but you and Tom Wolanin your counsel for this committee have been on the ramparts for many of us for the last few years and I want to welcome you and express my gratitude. There are thousands of students on my campus and on John Silbers campus whose opportunity for higher education to a very large extent is due to the work that the two of you have done in the last few years.

President Silber is always provocative and often reasonable and I want to return to some of his proposals in the colloquy later and perhaps at the end of my remarks which are addressed more at the question of financing I think then of cost containment, but he raises some issues that must—with which we must struggle and I would not want you to leave today without an expression of concern about the principal tasks before you which has to do with reauthorization of the higher education assistance programs.

It has been and remains the stated goal of the Reagan administration to reduce the Federal role in higher education by reducing substantially student aid and eliminating most categorical programs. This administrations chief goals in education seem to be prayer in the schools, tuition, tax credits and abolishing the Department of Education. To a large extent I would have to agree with Mr. Bennett that the one thing they have done that has been very good, of higher education particularly Mr. Silber would join with me, and this is straightening out the economy a bit, reducing inflation, that is helpful to all of us, as helpful as anything.

Some of the tax proposals currently before us will not be—Administrations package will not be at all helpful in preserving choice in the independent sector. The challenge posed by the administration has been the occasion and will continue to be the occasion for a spirited public debate on the proper role for the Federal Government and that in the context of that debate, you will in the next year be looking at the reauthorization of these acts. I think that a role which has been reaffirmed by the Congress and faces the administrations radical attack is clearly established.

In 1972 when Sputnik I dramatized a Soviet challenge for the leadership in technology, President Eisenhower said in a message to Congress,

> The security of the Nation requires the fullest development of the mental resources and the technical skills of young men and women, We must increase our efforts to identify and educate more of the talent of our Nation. This requires programs that will give assurance that no student of ability will be denied an opportunity for higher education because of financial need.

Eight years later in 1965 a Federal Higher Education Act stressed full educational opportunity as a national goal. President Johnson said,

> Every child must be encouraged to get as much education as he has the ability to take. We want this not for his sake but for the Nations sake. Nothing matters more to the future of our country.

He said.

> Military preparedness or armed might is worthless if we lack the brain power to build a world of peace, not our productive economy for we cannot sustain growth without trained manpower and not our democratic system of government where freedom is fragile if citizens are ignorant.

In 1972, President Nixon stated the purpose of the Higher Education Act of that year in the following words,

> No qualified student who wants to go on to higher education shall be denied by lack of money, that has long been a great American goal, equal educational opportunity,and it must now become a reality for every young person in the United States whatever his economic circumstance.

In 1980, President Carter reaffirmed the national goal in signing the education amendments,

> We have brought college within reach of every student in this Nation who is qualified for higher education. the idea that lack of money should be no barrier to a college education is no longer a dream, it is a reality.

Now as you know, Mr. Chairman and I am sure the other members of this committee are aware, the Higher Education Community is sometimes fractious and pretentious. It is a diverse community with institutions with many purposes, community colleges, State colleges, proprietary institutions, research universities. President Silber taught me long ago that there are really no—there is no public university that is fully public and no private or independent university that is fully independent All depend upon a partnership of support in a society.that encourages that.

I would call your attention to the recommendations from the American Council in Education which are not—do not call for radical restructure of the Higher Education Act but just to touch a couple of technical issues and only very briefly, with regard to the Pell grants. The proposal which is not one I think that any sector of higher education, with which any sector is fully satisfied, but one that I think represents a responsible compromise is the request that in authorization the percentage of cost limitation on the Pell grant should remain at 60 percent, that nontuition allowances would be raised from $2,000 to $3,000 for students living on and off campus, $1,500 for students living at home.

The tax rates on discretionary income should be adjusted to allow the typical family of four to be eligible for up to $30,000 adjusted gross income. I would also call your attention to the ACE's recommendation regarding guaranteed loans and national direct student loans and these are areas of the present legislation that trouble me most and to which I think Dr. Silber is speaking and of which it seems to me we need to look very carefully at some proposals such as one he suggests that would involve the collection through the IRS and a longer term for repayment. I do want to point out that the ACE has recommended to you with respect to need analysis that the definition of independent students be changed to require parental income information be submitted for all undergraduate applicants who are under the age of 22 unless they are married with dependents or they are veterans, orphans or wards of the court. That change would be very important.

Within the Higher Education Act, there are a number of programs involving categorical grants and I hope that your committee will look very careful at these—carefully at these in your recommendations for reauthorization. While I could mention several that have been useful to the University of Massachusetts, there are others that represent clearly as I think the issue to which I have been speaking so far represents the role the Federal Government has played. Only the Federal Government as appears in our system will take a longer look at national needs, a broader look at certain issues of national security.

Proficiency in foreign language as a matter of national security is probably not going to be dealt with by the State. The issue of graduate education is not going to be dealt with as comprehensively as it should and there I call your attention most especially to the report of the Commission which looked at this as well as the Commission established by the present administration which recommends a reauthorization of this act with some adjustment. The most serious problem in graduate education right now I think is the problem of opportunities for minorities. Our graduate schools are more segregated than they were a few years ago. I believe that all sectors agree that funds available should go to the most needy students and also that this goal as stated on a bipartisan basis for, OK, this more than a decade, should continue to represent the goal of the Federal Government and this particular legislation.

We can come back to some of the issues raised by President Silber. I very much agree with him that we need to look more carefully at the process for providing loans. I do not think that this is going to do anything about the issue of duplication to which he speaks and I regret that the two issues of duplication that he spoke of, law schools or nursing are issues that have not really—again, they have not taken place yet but I agree with them that there is duplication in the independent sector and in the public sector and we need to find ways to address it.

I think we also need to find ways to address the problem of more efficient management. I find his proposal which I have read carefully to have perhaps been a more comprehensive proposal at the time he first put it together around 1978. If that proposal however had been in place then, the University of Lowell would not have increased as it has in the last few years where it had rather strict prohibition against growth of an institution, the ones that I suspected would be very difficult to impose.

I happen to be an advocate of increased tuition in the public sector. If members of the public are not willing to pay taxes and if we want quality in higher education then I think we should let public tuition rise a bit. I think that there are many reasons for this; it may have risen indeed as tuitions across the board perhaps during a period of high inflation to give us a rather—to give us a picture which cannot be projected off into the future as some want to. I do not think that what we have seen in the last few years will be the pattern for the next few years if inflation is held in control but there is a serious problem of providing in this whole package I think of the mechanism of providing loans and it is at that point that I think President Silber and I would join company in searching for some procedure.

I am troubled by his procedure because I think it might increase costs rather then shrink them and increase duplication but I think he would be willing perhaps to explore with me and I hope the committee will explore some way of using the Internal Revenue systems collection process in stretching out the process over time that loans may be recaptured.

Up until about 1970—1968 or 1970, it was my feeling as you are aware, Mr. Chairman because I was a strong advocate that we should maintain low tuition in the public sector as much as possible and that it was an obligation of the Government and society to provide opportunities for education and essentially to underwrite them to a large extent. Milton Friedman first proposed the idea in President Silbers proposal that it is the individual that benefits and therefore the individual should pay. I found that at the time compelling. I have not thought as much about it and we are facing a time of more stringency. It is clear however by the end of the 1970's we realized again that we all benefit from higher education and that indeed we all must share through a combination of resources; the Federal Government, all of us have a stake in the survival and the vitality of the independent sector for here are many of our highest quality colleges and universities in the country.

On the other hand, we have an enormous stake by seeing that opportunity is available in a diverse setting for all our students and that they should have maximum choice and the opportunity to go as far as their ability and their incentive and aspiration will carry them.

Thank you.

Mr. Ford. Thank you. Dr. Duff.

STATEMENT OF JOHN DUFF, CHANCELLOR OF HIGHER EDUCATION FOR MASSACHUSETTS BOARD OF REGENTS

Dr. DUFF. Thank you, Mr. Chairman. I have just returned from a ceremony at Boston University as their 1,000 students received the new scholarship program, which, by the way, were initiated partly through the good work of Chester Atkins when he was chairman of the Ways and Means Committee of the Senate, and we had a beautiful crowd, 2,500 people at John Silber's institution. He also said some nice words in introducing me about the royal board of regents, so I hope he does not think I am going to be somewhat ingracious by disagreeing with John about some points but John makes some very forceful points.

He usually reminds you—I have told him this—you see some people and you are reminded of a saying like a beautiful woman, "She walks in beauty like the night." With John Silber, I always think of the Irish proverb, "Contention is better than loneliness." He starts off that way and he gets a good fight started.

About 7 years ago, when I was president of this institution, I engaged in a couple debates with John Silber on the tuition aid fund and our research which was supported by organizations such as the American Association of the State Colleges & Universities indicated that the initial cost of the fund in 1978 would be about $20 billion to the Federal Government, which is quite a large sum to contemplate. It also would require students to engage in indebtedness at current prices of about $60,000 if they were going to an institution such as many in this State as Harvard, B.U., Tufts, very nice what charges are made for tuition so you talk of $60,000, some of them happen to marry other students at the school and they are beginning their lifetime career with a debt of $120,000 and they are not going to feel too good about putting 2 or 6 percent of that to IRS. Starting right out, I think that would add discouragement to it.

Beyond that, there is a tradition in American industry and in our American life that parents do have some responsibility for the education of their children particularly in higher education and I think that is an obligation that should not be lightly discarded. We also finally argue that there are questions of equity that the idea of a person born in very low-income circumstances undertaking a debt of $60,000 is inconceivable. For somebody coming from a large income, who can see the benefits of an education in a distinguished institution such as Boston University, that is possible. For people coming from a background where parents perhaps have never gone to college, the idea of undertaking such a debt would be fantastic and those people really, in terms of equity, deserve things like Pell grants and other kinds of direct grants from the Federal Government.

Another point I would make too is that the Federal Government has long had a major role in education in this country and a very important one. I am not one of those people who argue for the ending of the Federal Government's role in education. As a historian, I have read a great deal of American history and I often noted that in the age of the Founding Fathers of the 18th century, the one piece of legislation passed by that first Congress that the historians most applauded was the northwest ordinance and that northwest ordinance provided free land for education throughout all those States of the great Midwest. That was the first role of the Federal Government, then right after the turn of the 19th century, they established the military academies at Annapolis, at West Point, because the Federal Government believed that those kinds of funds should be expended for education of our populus. Then, of course, we had what historians have said may be the most significant act passed by the Congress in the 19th century, that was the Morrill Land Grant Act that began assisting with the great land-grant universities in the country.

We move to the 20th century and what piece of legislation has effected more people perhaps then any others in this century, the GI bill which opened up vistas of education for hundreds of thousands, yes, millions of people who would not have dreamed of a college education beforehand and then we come to the national defense student loan which were proposed by that great radical Dwight Eisenhower as an incentive for people to attend college and to get involved in it and people like the chairman and others have been strong supporters of those kinds of loans down through the years and I believe that the role of the Federal Government is important there, that there is an obligation of the Federal Government to continue that kind of support and not one that says it is time for the Federal Government to withdraw from this business. Because it is a very important role that the Congress has in higher education.

I also would have to say that certain exaggerations are said about the role of public higher education. Add right, this is not a time for me to get into a dispute with John Silber and I find it amazing to say that the cost of public higher education is higher than in independent colleges. This institution here, which I was president for 5 years and now distinguishedly led by Bill Hogan, spends about less then $4,000 a year per student of direct State appropriations. Of course there are costs you can say for capital but it is nothing—I have heard independent college presidents say, when they are charging $12,000 tuition to students, "of course this is only a third of your cost here, the university is providing the rest." So we are nowhere near that. The great public institutions have long provided cheap, affordable, economical education in this country. We continue to do so and we are not extravagant.

John, I have in 5 years as chancellor, I have not given 5 minutes to thought for a new—for a publicly supported law school and nobody on my staff has and no public president has ever suggested——

Dr. SILBER. Talking about the nursing school.

Dr. DUFF. All right, the nursing school.

Dr. SILBER. Talk about the engineering school where you asked Boston.

Dr. DUFF. Now, that is not a good point for you there because you know what we did there, we developed a program where we brought Boston University in and——

Dr. SILBER. And your people tried to kill it in the legislative session.

Dr. DUFF. No, John, you are not being fair there. I mean the chairman of the Ways and Means was there and he knows the truth of that.

Mr. ATKINS. I am covered under the statute of limitations.

Dr. DUFF. In the fifth amendment. Beyond that, the only nursing program that has been proposed for a new school of nursing is at Roxbury because we know that throughout the State both in public and independent have failed to do something—do good work in minority education in the health profession. We have got 2 percent minority nurses coming out of all the colleges independent and public in Massachusetts so I will not apologize for starting a college at Roxbury because it is needed. That is the only one that has been proposed.

Another point, in 1976, when I came to Massachusetts, there were 31 public institutions of higher education in the State, today there are 29, the numbers have been reduced by 2 so you cannot say the public sector has not been doing something about cost containment and we continue to do so. For the past 2 years, we have been making studies of programs that are duplicative in the public and in the independent sector and we have recommended phasing out of programs. This institution here was built, members of the committee, primarily as a textile training institution, Lowell Tech section in the 1890's and when that business was important in this country. It was phased out about 15 years ago at a time because there was not any further need, we had something like 15 professors and 9 students in textiles so it was eliminated, major programs were eliminated in education in both my administration and that of President Hogan. Those kind of things are what have to be done because we do face a serious problem, Massachusetts particularly.

In 1992, we will have 42 percent fewer 18-year-olds available to attend college in Massachusetts then we had in 1979, the figures are not much better in most of the Northeast and indeed the Middle West for Michigan and Illinois, the figures are pretty depressing as well. So we have to plan for the possibility of reduced enrollments and we are engaged in the major planning project at the board of regents in that particular area.

We are going—we are trying to involve all the independent colleges as well because we know there are not going to be enough 18-year-olds to go around when you have 42 percent fewer. We are looking at new population but we are also looking at cutbacks. That is why we have reduced the public sector and we have begun programs such as the Boston engineering collaborative. I find it amazing to say that I was against that program but it was my idea that particular program that we would develop—instead of building a new engineering college at the University of Massachusetts in Boston, we developed a 2-year program for admitting students to U Mass, Boston, who would then finish in 2 or 3 years at Boston University at Northeastern, at Tufts, or Wentworth with the State paying the difference in tuition between the public sector and the independent sector. In other words there was a stipend then given to each student who went for the third, fourth, or a subsequent year to B.U., to Northeastern, to Tufts, and that is the kind of imaginative thinking I think that we have to get into for cost containment.

We have to look very carefully at every program both in public and independent sectors in the State and I have to say that we have had very good cooperation with the independent sector at the board of regents. We have to see where there is unnecessary duplication and get the independent sector and the public sector to work together. There is great opportunities for cooperation but it also must be understood that there is a distinct role, and a different role for a public institution, and for an independent one, and it is in those two roles have to be understood.

I agree with Chancellor Duffey to a certain extent that tuitions were too low in Massachusetts; 10 years ago, here at the University of Lowell, tuition was $300, now it is almost $1,200, so the public sector has looked at that very well. I agree also that we had to do more for the independent colleges. Scholarship aid has gone from $19 million when the board of regents came into effect in 1981 to $60 million this year. Again, thanks to the work of the Massachusetts Legislature and the Governors that we have worked with over the years. We have done the things that are necessary to keep both systems operating in the state but I do not think that we will achieve much more unless we have very strict and very close cooperation between the independent and public sector in avoiding the problems of duplication that both President Silber and Chancellor Duffey have referred to.

Thank you, Mr. Chairman.

Mr. FORD. Thank you very much. One of the pleasures of coming to Massachusetts is that you meet so many interesting people who gather here with strong opinions.

Mr. ATKINS. There is very little loneliness in this State, Mr. Chairman.

Mr. FORD. Joe, I have to correct you; you said that John Silber came up with this plan in 1978; at least as far back as 1968, I was on a program out in Denver, for the Education Commission of the States, and John and I were not intended to debate; I was there to talk about elementary and secondary education as a matter of fact and he talked about the Tuition Advance Fund. We ended up in a debate, at least in the newspapers, and I have been watching over the years as the Tuition Advance Fund has evolved and a lot of the things that frightened people who were instant opponents to the idea are no longer in John Silber's proposal. However, I do have to say as I have said from the beginning of discussions with John and reading his material over the years, first, that I admire the tenacity with which he has pursued the idea and the flexibility he has shown in changing elements of the concept as it has gone along. I would mention to you, John, that in 1974 I introduced plant closing legislation and it finally was reported out of a committee last week. By the time it got reported out it did not look anything at all like the thing that the chamber of commerce has raised money with by fighting it for all these years except that the chamber of commerce is still opposing it as vigorously. Strangely enough, they hand Republican members of the committee the same speeches that they handed to someone else 10 years ago and the bill does not have any of that in it anymore. It was so watered down that Sylvio Conte and I put it in as a bipartisan bill, the first time that a bipartisan plant-closing bill ever went in. I think we may have a chance of passing it in the House after all these years mainly because it is not doing a lot of the things that we set out to do. I emphasize that with what you have been trying to do with this approach to student aid. I am stuck however with the problem of what is doable, in the political process. We are currently trying to reauthorize higher education. There is and has been for a number of years very little difference between the Democrats and Republicans on the education committee either in the House or the Senate when it comes down to the nitty gritty of writing the legislation in the field of higher education. That is not true with elementary and secondary education with regional fights that cause all the trouble.

But, in the field of higher education, we have had that kind of bipartisan support. I am optimistic that when we finally put our magic bill together this fall that it will be cosponsored by most if not all of the members of both parties. However, it has to go to the President who started us off this year by recommending that we cut $2.4 billion out of the anticipated Federal budget of $8 billion. He explained that, well, we are really not cutting anything, we are just adjusting the program so the money that the middle class is making off with will be distributed more equitably to the lower income people. And then there were seven ways in the budget in which he just knocked the low-income people completely out of college. Also the President last month met with the House budget people as part of his process of trying to find a compromise on the Social Security issue. He gave them a little spontaneous speech about things in the Federal budget that he thought we were wasting too much money on. He added that a tax increase now would lead to more cattle ponds. He was referring to the fact that on his farm the Department of Agriculture had offered to build a cattle pond for him and he generously turned down the Federal largesse and he says that we are building too many cattle ponds. I am not sure I would know a cattle pond if I saw one but then the President cited education as one area of nonessential spending.

Mr. Reagan said, "Should we let them go to Princeton or Yale or Harvard? That is what community colleges are for, the Government has no responsibility to fund luxury education."

I then also have to deal with Secretary Bennett. Hopefully we can get together with him sometime this year. I am not sure whether they are being unkind to either of you when some people refer to him as a protege of John Silbers. I am pleased to have your prepared text because when he testified at the very beginning of this process before the committee he used the expression, "expensive private institutions" so often that I stopped him at one point and said:

> Mr. Secretary, I have checked you out and I am sure you have checked me out; we both have degrees from both public and private institutions, we have both attended both and we have been associated with them. I can say "private institution" without saying "expensive" in the same sentence. Can you say "private institution" without saying "expensive" in front of it?

Whereupon, he launched into a long dissertation on the fact that the private schools, more than any other, the independent schools have been inordinately increasing cost while the quality of education at those institutions was in no way related to that increased cost. I did not want to do it in front of the whole group but I stepped down to talk to him when he finished his testimony and said, "What do you think John Silber would have said if he could hear the things you were saying about private education today?" and he said, "Well, I think that John probably would agree with most of what I said." I will send him a copy of your testimony today that will quickly disabuse him of that notion and if you have a chance to talk to him you might help because I do indeed want to be able to work with him. We will never get a bill signed if we have got a Secretary saying that it is wrong to a President who feels that we should be reducing the commitment rather than increasing it.

You now talk about the Tuition Advance Fund as being something not to substitute for other forms of Federal assistance but to complement them.

I did a little quick calculation. We now have 6 million students on college campuses across the country who qualify in some way for Federal aid, so presumably that 6 million and some additional factor would qualify for the Tuition Advance Fund. If you allow the loans to go from $2,500 to $7,000 and you assume something close to a $5,000 average, then you are looking at a first, year appropriation of $30 billion. I am afraid George Bush would become President as a result of the present President's stroke if he even mentioned that kind of number to him and so, very frankly, it is the reason why those of us who spend a good deal of time trying to think through what really would make some sense, a little more sense than what we have been able to patch together, cannot really move very far toward the idea of trying to sell that kind of initial investment. I have no quarrels with the arguments about the long-term value of taking that approach, but getting the initial investment is very tough.

Mr. Stockman has a mind fix on the idea that we should save all this money in the first year. In the Guaranteed Student Loan Program, for example, if we had adopted their budget we would have to reduce the loan originations for the coming year by 50 percent. On approximately one-half of all the loan originations we would just have to terminate. Mainly because the cost in the first year of making that loan is relatively small, we will spend probably $370 million and that will be through the banks leveraged into about $7¼ billion in loans.

Down the road, however, we will continue to pay the interest subsidy to the bank that originated the loan or the secondary market that owns it at that time and I should say parenthetically that now that includes major Japanese banks and major German banks who are coming over here and buying our student loan paper. Your comment and prepared statement is indeed unfortunate, John, if you still believe that the default rate on the Guaranteed Student Loan Program is 11 percent because it has been below 5 percent for some time now and we think that it is trending down even better than that.

The reason I say that is unfortunate is that when John Silber says things it gets attention and you are an authority, a recognized authority, somebody more than just a fellow with a college education from out of town. People know you throughout the country as someone who has been a student of this, and I would ask you to take another look at that, because I would not want to pick up a newspaper after I was trying to tell everybody how well we were doing and how responsible the students have been who have benefited from the program and see you use it against us.

Indeed, in the late 1970's, that was about where we were. I think we were in 1978 at about 12 percent. Then you mentioned a 25-percent figure for some institutions, and I think there you may have been crossing the line between the Guaranteed Student Loan Program and the Direct Student Loan Program.

In 1981, Secretary Bell issued regulations to cut off new capital for any institution that exceeded 25 percent on its default rate. And there were about 130 institutions that were in that range out of the 6,000 in the country.

Interestingly enough, more than half of them were small church-related private institutions where one would expect that the ethic of paying back the loan would be very high. But what we discovered was that they were also small schools that did not have a very good business office and nobody told them that we were serious about them collecting the loan. So they never bothered to write a letter to the student and ask them to pay for it.

When Bell did what he did, I supported him, and it is one of the few times I was able to say of this administration that somebody was doing the right thing with education.

Indeed, now we know that that number is lower. I do not believe at the moment we have any institutions that are being cut off by that cut-off figure. I do not think we have any institutions in excess of 25 percent but if we have some with 25 percent, there are now only a handful.

It is important that in this process we try to stay with those numbers and understand them because when a President says something like you are paying the way for people from families of $100,000 income or more, everybody believes that. If this President said tomorrow is going to be Sunday, half the people I represent would go to church tomorrow, they would not question it, and when he says something like that, and I do not know who writes this stuff for him, they cannot get it back out of their head, it just will not come back out of their head. Now we have searched high and low and finally one of our friends here in Massachusetts found a family with income over $100,000 that got some Federal aid. If you made an income of $125,000 last year, had four children in college at the same time out of six children in the family, the total cost for the four of them in school this year would be $56,000. One of the under-graduates qualified for a $1,000 guaranteed loan. So we will be lending that family one fifty-sixth of their cost. Joe Cronin had to look all through New England to find that one and we cannot find another one to go with it. Yet, Mr. Bennett has on the record at this committee and we are still waiting for a listing of the 13,000 documented cases of students getting their way paid, not just some help, but their way paid to college from families with $100,000 income or more. That got a lot of press because in these early weeks Mr. Bennett got press every time he talked and that sticks with people. The Secretary of Education said this is happening. It frankly makes my blue collar workers' blood boil because they know that their kid has been told at Michigan, Michigan

State, or Wayne University, the best we can do for you is to lend you about one-third or one-fourth of what it is going to cost to go to school and they say, "How are those rich guys getting away with that?" That erodes support in the Congress for the program.

I guess I am making a plea to you, gentlemen; we need you. We need all of you people at the table but we need people who are as visible, as influential, and as educated as you are to help us get the dialog back around so that we talk about what you and I would really do in our perfect world that would make sense about the investment of this Government in the future of education in this country.

I do not think I find any place in the education community, any quarrel with what it is you want to do, nor do I have any quarrel with it. We just at the moment find ourselves dealing with a lot of factors that indicate that as much as we would like to improve, we will be lucky if we can run fast and stay even. We are not staying even. The value of the grants has decreased in real purchasing power so rapidly that Pell grant now at $2,100 is worth less then they were when they were $1,800 6, 7 years ago. It is a smaller percentage now of average cost. What has happened is that the loan volume has made up the slack, and as has been mentioned here, we are turning out a whole generation of kids with horrendous debts.

At the University of Detroit, a private institution, dental school, the average student indebtedness this year of the graduates was $40,000, and that was the average. There are a few rich kids in this school and they did not borrow the money, but if you look at what the others did using the HEAL Program and the other programs that are available to the health professions as distinguished from other groups in education, it is not unusual to find somebody at Georgetown, for example, who is looking at $100,000 on the books when they finish medical school over there. The law school is running someplace in the $40,000 to $50,000 bracket. What happens to these people, can we get them to come to a college and do research, can we get them to come to a college and teach, can we get them to get into a legal services program and represent the indigent, no. Can we get them to teach anyplace, no. They have got to go out and find an economically viable position to pay that huge indebtedness, because they cannot even buy a car or get a mortgage on a house, because the credit check is going to say hold it, you already owe all this money. On your income level, we think that is a big enough bite for you to chew, and you cannot have any more. I am a little worried about what it does to my auto worker. There is going to be a lot of auto workers unemployed because those people who should be coming into the market buying new cars have to delay that for many more years then their predecessors did. We are getting a new crop of indentured college graduates. At the same time we are trying to respond to the schools who are saying we should let them borrow a larger amount of money if they show some promise of completing education. We know that in those 5 percent that are defaulted, the largest portion of them did not finish what they started to do whether they went to community college, a proprietary school or a 4-year college. If they dropped out rather soon after they started, the chances are very high that they are defaulting. Part of it is attitudinal. I did not get what I went to school for anyhow so why should I pay for it. Most of it as a matter of fact, that you find in that 5 percent of the people who are not paying the loans do not have the money to pay their loans, they do not have a job. One of the reasons they do not have a job is a strong correlation between not finishing education and getting a job, and one feeds on the other. We find that if we could give more money to the juniors and seniors it is a very good risk. If we gave more money to the freshman, it is not the same kind of a risk, and we are looking now for the first time at those kinds of distinctions and limits.

I am taking far more time then I wanted to, but I cannot pass up the chance with you three very influential people. Everybody should know in this State, if they do not already, that the most over represented influence in Congress is the Commonwealth of Massachusetts, because if I write this bill with my committee and the Speaker gets some phone calls from up here from any number of people, I could mention who say it is a bad bill. I will never get it on the floor. Not until the Speaker is satisfied that his people in Massachusetts say that it is the best way to go under the circumstances, will I be able to go to the floor. I do not say that in any way at all to reflect on anybody, but the Speaker tells me that he has always represented more college students in his congressional district then any other member of Congress, and he never lets us forget it. He is looking over my shoulder even as I talk to you, and I told Mr. Atkins when he came on the committee, "Well, it is a case of overkill, they bring a high powered guy like you out of Massachusetts.

There is no question that the minds of the majority of the members of Congress are properly focused in the direction of an investment in education and doing a better job, but the difficulty is that when you are arguing about Social Security and defense, spending 24 hours a day as the two budget committees are now, nobody is paying any attention to a little thing like $8, $12, $14 billion in education. We are small potatoes in that argument.

As somebody on the committee observed, Cap Weinberger drops that much by accident in the wastebasket before noon everyday and we, thank God, do not have any cases of $600 toilet seats in our colleges or $9,000 Allen wrenches being purchased and things of that kind that are now bringing so much disrepute to the Defense Establishment. Nobody has come to us and said that the colleges are wasting money. They once did when we were building these dormitories with Federal money. Everybody had to have more dormitories than the other school and for a period of time we had dormitories sitting empty all over the country. Now we find suddenly that most of the dormitory capacity at most of the colleges, at least the 4 year colleges, is way over subscribed and just a few years ago they were wondering how to turn the dormitories into warehouses. Part of it is a change in the student population. You have got more conservative and pragmatic kids on the campus now then perhaps at any time in the past except when we were going there with the G.I. bill. For somewhat different reasons that were pretty pragmatic. But, they are not opting for the same sorts of things that kids 10 years ago did at college. It makes it easy. I have not seen a good demonstration for so many years I almost miss them. Joe is smiling.

Mr. ATKINS. We still have them here, Mr. Chairman.

Mr. FORD. Joe, take heart. In Iowa, they had set up for the day Bennett Beach in front of the administration building and they asked the students to come over and sign up if they were willing to give up their 2 weeks vacation in Florida, their stereo set and the sports car. I thought it was kind of interesting because in that part of Iowa it is hard to get people to demonstrate about anything and here we are this nice little Midwest college with all the nice Midwestern farmers going to it and they were raising absolute Cain. We have no trouble at all with the Members of Congress from Iowa in supporting this. You have demonstrations for everything up here in Massachusetts.

Mr. ATKINS. We even have college presidents who demonstrate.

Mr. FORD. Well, we are lucky to have that in Michigan, the Governor has announced to our State college and university presidents that he would not sign a bill that is on his desk giving them a 13-percent increase this year until each of them commits themselves not to raise tuition during the year. He has managed to give them an average of 9 percent a year and increases for 3 years and now this year they found enough money for 13 but he said not if you raise tuition. He has become, as all of us have, very sensitive to the fact that we are now picked out as the most expensive public college system in the country, expensive to a student, not expensive overall but in cost to the student. We do not like that, it makes us very uncomfortable and I expect some of these presidents who are up against the wall are going to be demonstrating this week in the Capitol. I have a lot of confidence that college presidents have finally found a way out of the ivory towers and people in Washington do listen to them. I used to scold my friends in higher education all the time. I would say to them if you would only get as smart as the farmer and the labor unions. You are the most educated people in the world and you do not talk to anybody except yourself. If you started figuring out how to raise a little hell around this place we would get some money in education. If you could bring your tractors up figuratively the way the farmers do it would get some attention.

I think Bennett is bringing them off the map. At least the private college presidents I run into are really rip snorting. I do not think there is a guy safe in his ivory tower any place in this country today and for that, we are grateful for the Secretary.

Mr. Atkins.

Mr. ATKINS. Well, I would just like to thank our panel for once again reaffirming the fact that in Massachusetts higher education politics makes legislative politics look simple. I appreciate your efforts, all of you, and what you have done over the past in this State to make us No. 1 in higher education in the country.

Mr. FORD. Mr. Hayes.

Mr. HAYES. Dr. Silber, if you could just find time to read the statement of a prior witness, Mrs. Ryan, who appeared here before you came in, and just send to me, it would help me, how your proposed establishment of a tuition advance fund would assist her. This is not an isolated case. We have a lot of them who are considered students who want an education and are part of that, I guess, forgotten part of our society. And she has done well in one school and now transferred into another. She is on public assistance and needs all the help she can get. Would this fund help her? That is my question. You do not have to respond now. I just would like you to drop me a line.

Dr. SILBER. All right. I'd be very pleased to.

Mr. HAYES. Before we introduce a bill.

Mr. FORD. Thank you very much. Let me just share with you a report I gave very recently to Chairman Hawkins, Chairman of our parent committee. He wants to know what is going on. We have told you about the hearings, the number of hearings that have been held. All of you participated one way or another in the effort we made when in December we asked 140 organizations representing higher education interests to give us by April 30 not pie in the sky but what would you like the law to say after we are through with it this time around. I am pleased to say that 88 of them followed the directions and that is very good for people in higher education. About 100 however did give us concrete suggestions and that has now been collated by subject matter and printed in a four volume print that has been redistributed That print now has 1,042 pages of specific language from the associations that want reauthorization and that of course forms the basis of what we will look at when we start writing it.

Now we expect at the present time to be ready to write this bill in September and get it passed in October. The Senate will start hearings we think sometime in September and act on the bill next spring and then by this time next year we should be in conference. Everybody will be worried about his election and it is a good time to have an education conference and hopefully it will be all over by the end of the summer and we will meet the deadline because we must reauthorize these programs before the beginning of the fiscal year since they are expiring. It is a very high priority for the committee and for the House. I thought I should say that people have been asking over and over again when is the bill going to be written, when will we see it. But very frankly it is in the heads of all these 140 organizations, it is still not on paper. They have given us bits and pieces. Many of the suggestions are agreed to by a number of organizations and when you get to the Pell Grant formula and the traditional fight between the publics and privates it seems they find new ways every time we go through this process to disagree with each other.

We hope to sit down with some of the principals this week and convince them that if the publics and privates are not able to get together on a mutually survivable plan, we will have to flip coins and make the decision for them and somebody is not going to like it and we do not know which somebody that will be. It is a bad way to do it.

The last time around the public and privates sat down and got their heads together. They gave us the formula that the Democrats and Republicans were able to support and hold tight on, we did not move one bit of it away from their agreed upon compact. Indeed, Chester, we had eight of the organizations or nine, large organizations representing the publics and privates who literally signed a letter of agreement saying that we will support the package if it reads as follows and they settled the supplementary education grant problems and the Pell Grant problems with a compromise. It is more difficult to put it together now because the budget cuts of 1981 remove some of the elements of the compromise and the privates justifiably feel that some of what we gave them as a part of the tradeoff was taken away from them. On the other hand, the publics also lost because the effect of 1981 was to freeze the progress in both the cost of education and the size of the grant so everybody sort of lost except the publics are telling me that they lost more and the privates are telling me they lost more. Whatever each of you can do with your respective sectors to tell them, it is all very fine, it is a good debate to have someplace but that the committee cannot be going in two different directions. I will have the University of Michigan on one side and my law school on the other side picking at me about where justice is and it is hard for us to use our own prejudices and come up with the right answers. So, to whatever degree you can encourage the groups that you are part of to really get serious about putting something together they can live with, we are past the stage where it is really very helpful to have an association of publics taking a hard stance for the benefit of their constituency and producing a similar hard stance from some spokesman for the private sector who feel that they have to talk for their constituency. I suppose both of them realize that what they want cannot be accomplished, that there has to be a compromise.

When we get a compromise between them that has them all leave sore as boiled owls about what they had to give up then they will figure it is probably a pretty good deal. If anybody goes out of there smiling it just will not work. They are going to all have to have a piece of it and I was pleased to hear what Duffey said about the cooperation between the publics and privates here. I had the good fortune, Mr. Atkins of coming from a State where at the college level our public and private institutions do not have a history of fighting with each other and they both profited from that long term relationship. Of course, we do not have the kind of very big nationally and internationally prestigious private institutions that you have here in Massachusetts. Ours are mostly small although they are numerous. They have survived very well in a State that most people think concentrates more on the cost of a football field at the University of Michigan then anything else in education. They have managed to get along very well over the years because there never has been a period when they were at each others throats. We have a tuition offset, as you may know, in Michigan for private college students that has never been appropriated at the level where it was committed at but I think it provides about $400 a year to every student who enters a private institution in this State. That has never been challenged as to its legality or propriety by the public institution because they thought it was a fair share of the taxpayers' dollars. If you try to do anything like that for the elementary and secondary schools I think open warfare would break out in Michigan but at the college level they have learned how to live together and that is why I find it sort of interesting to watch the national organizations that represent these same colleges in Michigan come to Washington. They are at each others throat and we need help from people like you to tell your principals down there it is time to make love, not war.

Thank you very much for your help.

[Additional material submitted for the record follows:]

[Whereupon, at 1:09 p.m., the hearing was concluded.]

PREPARED STATEMENT OF DIRK MESSELAAR, ASSISTANT DIRECTOR OF CONTINUING EDUCATION, UNIVERSITY OF LOWELL, MA, ON BEHALF OF THE NATIONAL UNIVERSITY CONTINUING EDUCATION ASSOCIATION

Mr. Chairman, members of the subcommittee, I am Dirk Messelaar, assistant director of continuing education at the University of Lowell in Massachusetts. I am pleased to have the opportunity to submit this statement for the record on behalf of the University of Lowell and the National University Continuing Education Association, a nonprofit national organization representing nearly 350-member colleges and universities.

Mr. Chairman, the community of adult and part-time students is growing at a rapid pace. By 1982, conservative estimates showed that part-time students numbered over 5 million, or 41 percent of postsecondary enrollments. At the University of Lowell, we have 7,000 of these students, or 40 percent of the University's total enrollment.

These students tend to be older than their traditional college classmates. These students often are working mothers and fathers, the underemployed, and the unemployed worker seeking new skills. These students represent the future trend for postsecondary enrollments and a national resource in a rapidly changing society. Yet these students do not receive a fair proportionate share of available Federal financial aid.

Of the 7,000 continuing education students attending classes, approximately 5,000 attend traditional credit courses. Of this number, less than 4 percent receive some form of Federal assistance. However, this paucity of assistance is, indeed mitigated by the fact that over 90 percent of our part-time students work full time. Of this 90 percent, 80 percent work for companies with a tuition reimbursement plan. *Therefore, at least 1,000 part-time students at the University of Lowell must underwrite their own college expenses without any form of federal or company assistance.*

At the University of Lowell, we serve many in our community who have been displaced by current changes taking place in the service-oriented and industrial sector of our economy. These individuals are often older adults who have been displaced economically and yet have dependents of their own. They are taxpayers and productive members of our national economy. They recognize the importance of life-long learning in order to remain competitive in the job market.

Mr. Chairman, I support Congressman Biaggi's bill, H.R. 2711, entitled the "Fair Financial Aid for Part-Time Students Act," which was introduced on June 11, 1985. The critical issue confronting this subcommittee as it begins its work on the reauthorization of the Higher Education Act is the issue of fairness for the part time and less than half-time student. I hope that this legislation figures positively during that reauthorization effort.

Mr. Chairman, members of the subcommittee, I wish to commend your efforts on behalf of the part-time students enrolled at the University of Lowell and nationwide. I thank you for this opportunity to submit this statement for the record. I would be happy to assist the subcommittee in any way I can.

PREPARED STATEMENT OF SENATOR NICHOLAS J. COSTELLO, THIRD ESSEX DISTRICT

I would like to take this opportunity to express my opposition to the reductions in financial aid proposed by the Reagan Administration. I object to these cuts for three main reasons. First, they are unfair to the working middle class which is already struggling to make ends meet while attempting to provide a quality education for its children. Secondly, the reductions, as proposed, would adversely affect the financial stability of many institutions particularly those private colleges which are already having difficulty balancing their books. Last, a reduction in educational opportunities which is represented by these cuts, means a reduction in the quality of life enjoyed by many Americans. It also severely limits the opportunities many may enjoy.

According to the most recent figures provided by the State Census nearly ¼ of those residing in my State Senatorial District would be ineligible for federal financial aid of any type if they wanted it. That is they have a family income which exceeds the $33,000 cutoff point proposed by the Administration. This means that many qualified students would be unable to attend the institution of their choice because their parents "earn too much" in the eyes of some in Washington and should not need financial aid in order to attend college. We have all heard horror stories at one time or another of people having to mortgage their homes in order to finance a son's or daughter's higher education. The choice should not have to be made by middle America whether to finance an education or hold onto a house. The option of an education should be open to all. Further, income projections made by the same Census indicate that the average income per household in the Third Essex District will be about $32,500 by the year 1989. This means that the income cutoff point proposed by the Administration would have become the average household income for this part of the State.

The schools themselves will also suffer under the Reagan financial aid package. For example, Merrimack College, a private Catholic institute located in my district, relies heavily upon federal financial aid programs in order to keep many of its students enrolled. The latest figures provided by the office of Financial Aid show that 1,600 students out of a total enrollment just over 2,200 receive the federally funded Guaranteed Student Loan. If the income restrictions were imposed, most of these students would lose their Guaranteed Student Loans as well as any Pell Grant funding they might have received in the past. As a result, many would be forced to leave school and the college would lose the income generated by tuition receipts. The tuition at Merrimack College is currently $6,200, an amount which cannot be paid out of the pocket of the middle wage earner. Can we afford to place this burden upon the private institutions of this country? The answer is a resounding NO. Public institutions would also suffer as over 1,000 students currently enrolled at Northern Essex Community College receive Pell Grants. These too would be jeopardized under the Reagan program. Both of these schools have witnessed a dramatic reduction in federal financial aid since 1981 and can afford no more. We cannot be selective as to which colleges will be allowed to remain open and which will be forced to close its doors due to lack of tuition income or student enrollment. The moderate private institutions are just making it now, and further financial aid reductions would present a serious blow to their already tenuous financial stability. The variety of public and private schools from which a student has to choose from should not be reduced.

Third, these possible reductions in financial aid represent a reduction in the quality of life which is hard to measure but never the less vital. If our children are not given the opportunity to reach their potential then our society and way of life will surely suffer. If we do not make an effort to cultivate this most precious natural resource to benefit society, as well as the individual, this country will regress instead of progress into the 21st century. All facets of the nation will suffer, the economy, the arts, the sciences, the intellectual vitality of the nation would be in danger of becoming corrupted. This is too great a trade-off price to pay in order to cut a few million dollars from a nearly 500 billion dollar budget deficit.

For these three reasons, I urge the Congress of the United States to increase rather than decrease financial aid opportunities for the students of America. The cost of not doing this cannot be measured in dollars, but rather in that intangible gauge better known as quality of life for all.

HARVARD UNIVERSITY

OFFICE OF THE PRESIDENT

MASSACHUSETTS HALL
CAMBRIDGE, MASSACHUSETTS 02138

October 28, 1985

Dear Mr. Chairman:

I regret that I was unable to testify at the regional hearings which you chaired in Lowell, Massachusetts, on the reauthorization of the Higher Education Act of 1965. However, I would like to comment in this letter on two of the matters which were the focus of the hearing: student indebtedness and cost-containment in higher education. To limit my remarks to these two issues does not imply a lack of concern about other matters which must be addressed in reauthorizing the Higher Education Act. Indeed, Harvard is participating in the deliberations of the various higher education associations which are working with your committee on this far-reaching legislation. The two subjects which I will address are of particular concern to independent universities such as Harvard, since the price paid by students to attend independent institutions is generally higher than the price of attending public schools.

As you may know, I have long been interested in student aid issues and wrote about them extensively in my annual report four years ago. (I have enclosed a copy for your information.) I believe now as I did then that the federal government has an essential role to play in assuring reasonable access to colleges and graduate schools. The states alone cannot do the job either through public sector institutions or state scholarship programs, nor can private philanthropy keep up with the need. In addition, since many of the benefits of a broadly based higher education are national in scope, it is appropriate for the federal government to contribute to strengthening the process.

It is difficult, even in the lower-priced public institutions, to expect needy students to pay for their education entirely on their own by working and borrowing. Despite the existing student aid programs, approximately one-third of all high school seniors from the highest ability quartile and the lowest economic quartile have traditionally failed to go to college. Presumably, many of these low-income high school graduates simply do not believe they can afford to forgo full-time employment and pay the living costs and fees required to attend even low tuition colleges and universities. Although most states have provided some scholarship funds, the average awards are clearly insufficient to induce many needy students to attend. It is here that the federal student aid programs can play an important role by filling the gaps that state subsidies and private donations cannot fill.

I am concerned, however, that the amount of federal student aid has decreased in recent years, despite this need, and has shifted from grant aid to loans. Since 1975-76, the proportion of total student aid awarded in the form of grants has dropped from 80 percent to 45 percent and the proportion of aid in the form of loans has risen steadily to the current 52 percent. This increasing reliance on debt for financing an education has had several pernicious results. The rising level of debt per student has made it much more difficult to repay the loans and has contributed to the rise in default rates. It has also meant the postponement or elimination of graduate studies for many talented students. It has forced others to consider only careers with substantial financial rewards at the expense of teaching, the ministry, social work, and other important but unremunerative occupations. Finally, it has surely prevented some of the most needy students from even contemplating a college career.

At my own institution, a recent survey of our graduating seniors for the first time included questions about the effects of student indebtness. This survey shows that the level of indebtedness is indeed having a substantial impact on students' career choices, on their decisions about the sort of jobs they take after graduating, the kind of graduate programs they pursue, and when or whether they choose to continue graduate study. I believe that students should be prepared to contribute, even substantially, to the cost of their education. For several reasons, however, I am fearful that the present reliance on loans for financing an education--particularly at the undergraduate level--may be contrary to the country's interests. Those students who have been forced to assume substantial amount of debt as undergraduates are less likely to consider graduate school, particularly doctoral programs, and are less likely to consider lower-paid careers. Yet studies show that because of the rapid expansion of university faculty in the late sixties and early seventies and the subsequent dearth of positions for young Ph.D's, an aging professoriat will have to be renewed almost in its entirety within 25 years. Thus, at the very time that we should be asking our brightest students to form the core of our future faculty and research establishment, they are being forced for financial reasons to forgo an academic or research career.

I fear that these effects also undermine our national effort to promote access to higher education for minority and low-income students. The problem of indebtedness is most acute, of course, for students from low-income backgrounds, among whom are a disproportionate share of minority group members. The recent studies showing a measurable drop in minority higher education enrollment since the mid-1970s suggest that financial problems, including loan burdens, have contributed to many low-income students' decisions not to go to college.

This is not a phenomenon limited to the higher-cost institutions such as Harvard. A recent study by the American Association of State Colleges and Universities concluded that in recent years lower-income families have lost resources since 1978 in student aid dollars. They have become less likely to send their children to college. While many decide to go to less costly schools, far too many others do not go to college at all.

We must also keep in mind the effect of student aid policies on the historically black colleges and universities, whose students are, as a group, more heavily dependent on federal aid programs. In addition to the institutional aid they receive through Title III of the Higher Education Act, these schools also have a great deal at stake with respect to the student aid programs. Since they continue to produce more than 40 percent of all bachelors degrees earned by blacks in the United States, our national need to increase the number of college-educated blacks is affected very significantly by the fate of these institutions.

Student indebtedness also has important implications for minority graduate enrollment and, in turn, our affirmative action programs to increase the presence of minorities on our faculties. At a time when the decline in minority enrollment is most pronounced at the graduate level, excessive undergraduate loan burdens are particularly worrisome.

Similarly, recent studies have shown the existence of a serious crisis in elementary and secondary education. One theme that is reiterated in these studies is the great difficulty in finding and retaining talented teachers--a problem that will be exacerbated as we again enter a period of teacher shortages. Although teaching salaries are generally low, it is troublesome to me that the very best students, who wish to teach and would be satisfied with a modest teacher's salary, are often unable to consider a teaching career because their level of debt upon graduating forecloses any option but obtaining a high-paying job. Similar problems exist in other important but lower-paying professions, such as the ministry or social work.

The federal government should have an interest in educating informed citizens, fulfilling the commitment to equal educational opportunity, promoting a vigorous economy through education and training, and enabling students to be educated to their highest potential. Creating a nation of debtors does not seem the right way to achieve these goals. In addressing the problems of student indebtedness, I hope that your subcommittee will redress the imbalance that has grown between the grant and loan support available to needy students, provide for loan-consolidation and extended repayment schedules so that students will not be forced into default by overly rigid and onerous repayment burdens, and authorize further research on the effects of these rapidly increasing indebtedness levels which I fear in many instances may have become intolerable.

The issue of "cost-containment" in higher education was raised by the Administration during this year's congressional budget debate when it attempted to cap at $8,000 the amount of college costs toward which federal aid could be applied, implying thereby that college costs above $8,000 are somehow excessive. In my opinion, characterizing this budget-cutting device as "cost-containment" is false and disingenuous.

The cost of higher education is quite comparable in both the public and private sector for institutions of comparable complexity and quality. The difference in price to the student primarily reflects the large public subsidies available to state colleges and universities.

There are of course important differences in cost among different kinds of institutions: experimental science, for example, is more expensive to teach than the humanities or business; schools with large research libraries demand more resources than schools which teach largely from textbooks. However, these differences in cost are not necessarily reflected in the price that is charged the student nor, therefore, in the amount of federal aid for which that student is eligible. In fact, in almost no case is the price that the student is charged close to the total real cost, since in the public sector the price is subsidized by state taxpayers and in the independent sector by philanthropy.

Institutions at present have strong incentives to keep their costs down. Since 1980, increases in educational cost have not been matched by increases in student aid. As a result, families, at considerable hardship, have had to increase their own contributions to college costs. Nationally, from 1978 to 1983, this increase in family contributions, adjusted for inflation, was 11.8 percent. At Harvard, because we provide 9.6 dollars in institutional aid for every dollar of federal grant aid our students receive, we have, thus far, been able to limit the increase in our family contribution to inflation. It is certainly not in our interest to raise tuition simply to recoup available dollars of federal aid, since that would increase our own aid burden almost tenfold. And we are particulary concerned that we may not remain attractive to middle-class students who are eligible for little, if any, grant aid but must depend upon loans and work. Although we guarantee every student admitted sufficient financial assistance to attend, we award aid only on the basis of need. As a result, we require a substantial financial contribution from the families of these middle-income students. Since we strive to maintain classes that are diverse in every way, including those of different economic backgrounds, it is painful to see this trend developing. We are attempting to find creative ways to enable these middle-income families to finance an education here and are mindful of the need to keep our educational costs at a level they can afford. However, proposed changes such as the recent efforts to place an income cap on the supplemental grant program and on the guaranteed student loan program would make the job more difficult.

There are good and valid reasons for the increases in the cost of higher education even though they have exceeded normal inflation in recent years. During the period of rapid inflation in the seventies, tuition increases were kept under inflation in order not to cause a crisis for our students and their families. As a result, the average faculty salary fell 15-20 percent in real dollars, and normal facility maintenance, construction, and renovation were deferred. Much of the recent increase in tuition levels can be attributed to our playing "catch up" with the needs that accumulated during the previous decade.

An added reason for rising tuitions in recent years is the rapid escalation of cost in teaching and research in critical fields, such as science. For example, the rapid pace of technology means that the cost of equipping a biology laboratory has increased approximately 25-fold in the last 15 years. A biology laboratory in 1969 could be equipped for $50,000; in 1984 it cost between $1,000,000 and $1,500,000. In 1955, we gave 36 courses in chemistry with 26 faculty, in 1984 there were 70 courses with 35 faculty. Added to this explosive growth of cost in the sciences is the cost of computerization in all aspects of the university, including research, libraries, administration, and instruction.

Despite these demands, the portion of our budget provided by the federal government for both research and student aid has decreased substantially, creating even more pressure on tuition levels. In 1969 the federal government provided 34 percent of the budget of Harvard's Faculty of Arts and Science; in 1984 it provided 21 percent. Tuition rose correspondingly from 24 percent of the total budget in 1969 to 37 percent in 1984. Accordingly, reduced governmental funding was not compensated for by private giving, even though we expanded much more effort and money to the task of seeking private support. Other Ivy League institutions report the same results. For less fortunate independent institutions without the cushion provided by a substantial endowment and a strong tradition of alumni giving, the pressure on tuition levels has been even greater. Accordingly very few independent colleges can afford anymore to admit all qualified students regardless of financial need.

The proposed reduction of federal funding for student aid in the guise of "cost containment" is misguided. Because students in the independent sector have proportionately greater financial need resulting from the higher price of private colleges, they are an easy political mark. It is not helpful to the debate to categorize these conscientious students as frivolous and spendthrift because they receive federal funds. Moreover, forcing them for financial reasons into the lower-priced public sector will not actually save money but will only shift the burden to state taxpayers. Such a shift in enrollment also threatens to result in the demise of many independent institutions and to limit the ability of higher education to provide access for persons of all economic backgrounds. The loss of private colleges will again only add to the burden of state taxpayers, since the cost of federal financial aid for students in a private college is far less than the cost of giving these same students an education in a tax-supported public institution. For these reasons, I believe Congress should think very carefully before endangering such a vital part of the educational system of this country.

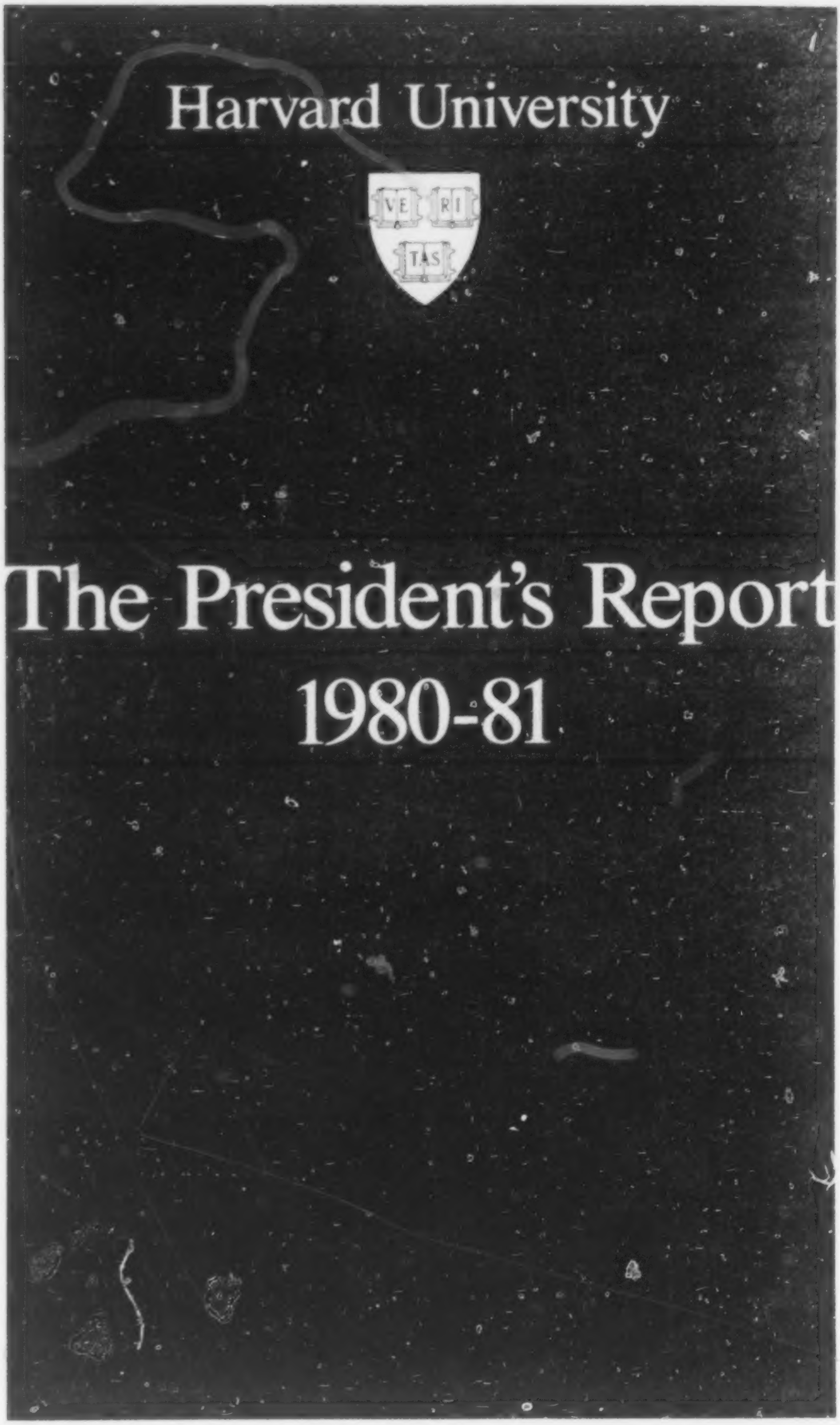
Thank you for this opportunity to comment for the record on the important issues you are considering.

Sincerely,

Derek Bok

Derek Bok

The Honorable William Ford
Chairman, Subcommittee on
  Postsecondary Education
320 Cannon House Office Building
Washington, D.C. 20515



Harvard University

The President's Report
1980-81

President's Report

To the Members of the Board of Overseers:

Ladies and Gentlemen, I have the honor to present my report for 1980-81.

The subject of this year's report was conceived last December during a meeting in the White House with one of President Reagan's deputies. Accompanied by my counterpart from Princeton, I had come to discuss proposals from David Stockman that would dismantle much of the bipartisan program for student aid that Congress had constructed over the previous fifteen years. We arrived armed with figures, statistics, and careful recitations of the harm that would befall the nation's students if Mr. Stockman's ideas were enacted. But we had scarcely sat down when we were greeted with an unexpected challenge. "What we need from you," said the White House aide, "is some help in thinking through what the role of the federal government ought to be in higher education." Alas, like jesting Pilate, our host could not tarry for an answer. We had been told before we entered that we were fortunate even to receive an appointment in an unusually hectic week and that we could stay no more than fifteen minutes.

Yet the task of defining the proper federal role is still important, and not merely because of Mr. Stockman's startling proposals. The programs of student aid that took shape during the 1970s developed in an era of seeming affluence, of social engineering, of ambitious government. Suddenly, all that has changed. The nation feels pinched and overextended. A new administration is in office riding a ground swell of public concern that the government has tried to do too much and should sharply cut back its responsibilities.

At such a time, educational programs are a natural target for scrutiny. Their values are intangible, their effects long-term. They fall squarely within that narrow band of federal undertakings that seem discretionary, up for grabs, outside the more secure redoubts of defense expenditures and payments on the national debt. And yet, in a period of sluggish growth and grave concern over the economy, education is a matter of acute national importance. As Peter Drucker once observed: "The abundant and increasing supply of highly educated people has become the absolute prerequisite of social and economic development in our world. It is rapidly becoming a condition of national survival. . . . The essential new fact is that a developed society and economy are less than fully effective if anyone is educated to less than the limit of his potential." In such a world, we need to review the government's educational programs with special care not only to decide in what respects they are overgenerous but also to consider the extent to which they represent a sound investment in the nation's future.

This subject is also vital to colleges and universities, and no less so to Harvard. Alumni often ask me how great a portion of the University's budget comes from the federal government—and it is clear that they would prefer it if the fraction sank to zero. Although I understand their sentiments, the plain fact is that universities like ours could not survive in their present form without federal support. In 1980, Harvard received $108 million from Washington, almost 25 percent of our total budget. The bulk of these funds went to support our research programs, chiefly in the Faculty of Arts and Sciences, the Medical School, and the School of Public Health. But a full $12 million came in the form of student grants, another $34 million went directly to students as federally subsidized loans, and more than $3 million arrived as federal subsidies for campus jobs for students. So pervasive has this assistance become that during the year just passed 70 percent of our student body received some form of financial support from the government.

Student aid, of course, was an integral part of Harvard policy for generations and even centuries before the emergence of federal aid. In 1643, Lady Anne (Radcliffe) Mowlson contributed the sum of 100 pounds sterling to provide "a perpetuall stipend for and towards the yea[rly] maintenance of some poor scholler. . . ." Through much of the seventeenth century, the College devoted up to one-third of its total revenues to student assistance. Although this percentage fell sharply in later years, Harvard's scholarship endowments slowly grew and helped to keep the University open to able young men of modest means.

PRESIDENT'S REPORT

In the early 1930s, the University strove mightily to increase its scholarships to attract a diverse and genuinely national student body. As President Conant declared, "We should be able to say that any man with remarkable talents may obtain his education at Harvard whether he be rich or penniless, whether he come from Boston or San Francisco." By and large, these efforts proved successful. Yet even at the end of the 1950s, Professor Seymour Harris observed that "Harvard for generations has not been able to finance those most in need of help . . . the bottom 20 percent in family incomes."

The growth of federal assistance made it possible to attract more students of limited means while defraying some of the added costs of admitting these young men and women. And Harvard quickly responded. As President Pusey remarked in 1968, "The heightened interest shown . . . last year in attracting more disadvantaged students was sufficiently great to constitute virtually a basic change [in admissions policy]." In the years that followed, federal aid proved critical in enabling Harvard and other universities to maintain these policies despite inflation, growing regulatory burdens, and an exceedingly sluggish stock market. Not only in the College but in most of our graduate schools as well, the steady growth in government support from 1965 to 1980 made it possible to keep increasing student charges in the face of rapidly rising costs without driving away poor and middle-income applicants. Within two decades, therefore, federal assistance had become a vital force in shaping the character and diversity of the entire Harvard student body.

Although government aid is important to Harvard in fulfilling its basic philosophy and mission, no one likes to receive federal dollars that do not serve some important national purpose. Such support would not be justified. And as a practical matter, it would not last. Hence, at a moment when the nation seems to be reexamining so many government programs, I thought it timely to devote this annual report to a discussion of the proper federal role in assisting students attending colleges and universities.[*]

[*] When I began this report, I hoped to cover each of the two major categories of government support: student aid and research. It soon became clear that I could not do justice to both topics within the limits of space mercifully imposed on reports of this kind. I have therefore decided to confine myself to student aid, not because it is necessarily more important but because it is currently under attack to a degree far greater than is yet the case for research.

PRESIDENT'S REPORT

A Brief History

Although the federal government provided massive scholarship aid under the GI Bill after World War II, a sustained program of student support really began in 1958 under President Eisenhower. At that time, the launching of Sputnik dramatized the strength of Soviet science and convinced the public that the nation required a greater national effort in education. At the President's urging, Congress soon passed the National Defense Education Act. In the opening sentences of the bill, the lawmakers expressed their purposes in no uncertain terms:

> The Congress hereby finds and declares that the security of the Nation requires the fullest development of the mental resources and technical skills of its young men and women. . . . We must increase our efforts to identify and educate more of the talent of our Nation. This requires programs that will give assurance that no student of ability will be denied an opportunity for higher education because of financial need.

Although the terms of the Act were less ambitious than these sweeping goals implied, Congress did provide extensive low-interest loans for needy students and extended even more generous support to those entering fields of critical need, such as foreign language training and Ph.D. programs. This emphasis on encouraging particular types of needed manpower later grew to include the health professions, engineering, and elementary and secondary school teaching.

Congress took a further step forward in 1965 at the request of President Johnson. In the Higher Education Act of that year, the government moved beyond a concern for national preparedness to embrace an even more ambitious goal. In Johnson's words:

> Every child must be encouraged to get as much education as he has the ability to take. We want this not only for his sake—but for the nation's sake. Nothing matters more to the future of our country: not our military preparedness—for armed might is worthless if we lack the brainpower to build a world of peace; not our productive economy—for we cannot sustain growth without trained manpower; not our democratic system of government—for freedom is fragile if citizens are ignorant.

To further these ends, Congress created a new program of undergraduate scholarships for low-income students, supplemented by funds to subsidize student jobs and loan guarantees to make credit available to those needing help in paying for the costs of their education.

President Nixon returned to these goals in his higher education message of 1970. In his words: "No qualified student who wants to go to college should be barred by lack of money." Emphasizing a commitment that went beyond assisting talented students or students in fields of acute national need, the President declared that "equal educational opportunity . . . must now become a reality for every young person in the United States, whatever his economic circumstances." In 1972, Congress responded with an ambitious program, offering Basic Educational Opportunity Grants, as well as additional loans and stipends, to secure a college education for all students with financial need.

Yet another step was taken in President Carter's administration when Congress recognized the growing financial strain encountered by middle-income families in paying for advanced education. The Middle Income Student Assistance Act of 1978 expanded the definition of need expressed in earlier legislation so that Basic Educational Opportunity grants could now go to students from families with incomes up to $25,000 per year. Two years later, federally guaranteed and subsidized loans were offered not only to families of low and moderate income but to all students regardless of need. With this amendment, President Carter could declare that "we've brought college within the reach of every student in this Nation who's qualified for higher education. The idea that lack of money should be no barrier to a college education is no longer a dream, it's a reality." In fact, not only had *college* become a reality to all interested applicants; federally insured and subsidized loans made it possible for students to finance their graduate and professional education as well.

The size of these programs grew steeply as more and more students began to take advantage of them. By the end of the Carter administration, total federal outlays were climbing toward $7 billion per year—over $2.5 billion in scholarship grants, almost $2 billion in subsidized loans, approximately $2 billion in scholarships to dependents under the Social Security Program, and most of the remainder in work-study subsidies. As a result of these generous appropriations, over 2.85 million students were receiving federal grants by 1981 while 3.5 million obtained subsidized loans.

It was obvious from the outset of the Reagan administration that these programs would receive careful scrutiny. Nine days after his inauguration, presiding over the installation of his new Secretary of Education, the President announced that the Secretary's mission would be "to look at the appropriate role of the federal government in education, *if there is one*, and to report back." (Emphasis added.) The axe began 5 to fall shortly thereafter. First, Fiscal Year 1981 appropriations were cut $600 million from the levels required to maintain existing levels of support for all eligible students. Next, in the summer of 1981, Congress agreed to phase out the $2 billion in social security grants paid annually to dependent children. At the same time, the Budget Reconciliation Act cut $1 billion more from student aid appropriations for Fiscal Year 1982. Through these measures, Congress effectively repealed the Middle Income Student Assistance Act of 1978, which had extended the federal grant program to students from families earning from $15,000 to $25,000 per year. In addition, the legislators took back much of the ground gained by the 1980 amendments, which had increased the size of the grants and expanded eligibility for subsidized loans.

It was against this backdrop that the Office of Management and Budget announced its recommendations for sweeping new cuts last December. As reported in *The Washington Post*, Mr. Stockman hoped to reduce the already shrunken basic grant appropriations by over 60 percent, thus restricting awards to students from families earning less than $7,500 per year. Appropriations for loan programs would fall by more than 20 percent, with graduate students having to borrow at much higher rates and undergraduates being required to repay their loans at rates of interest that rose to market levels commencing two years after finishing college. Under these proposals, total federal outlays for student aid would sink to less than half of their 1981 levels, and the entire structure of student assistance would be radically transformed. It was this prospect that brought us to the White House and prompted an invitation to offer our views on the basic rationale for federal involvement in higher education.

THE NATIONAL INTEREST IN HIGHER EDUCATION

Higher education at any level can bring satisfactions to those who seek them. Some of the rewards lie in acquiring new interests, added knowledge, and greater appreciation of intellectual endeavors. Others come from gaining vocational skills that open doors to higher incomes and more challenging occupations. In either case, the benefits can often last a lifetime. But they are not the sort of benefits that justify large expenditures of public funds. At least in times of austerity and fiscal restraint, one can strongly support federal outlays only insofar as they serve some *public* purpose that transcends the private ends of the immediate beneficiaries.

The public benefits of higher education have been traditionally defined in much the same way as described by a succession of Presidents during the growth of student assistance programs after 1958: to enrich our civic life by preparing a more educated citizenry; to promote economic growth by enhancing the skills and talents of the labor force; to allow opportunities for everyone to advance and prosper to the extent that their native abilities allow. These purposes are so familiar, so instinctively plausible, that we can easily take them for granted. Nevertheless, a skeptical mind can attack them on a number of fronts, especially when they are used to justify a multi-billion dollar program financed with tax dollars. Is more education supposed to bring us higher productivity, better government, and greater upward mobility? Why is it, then, after such a vast expansion of our college and graduate school enrollments, that productivity has declined, that voter participation has diminished, that confidence in our public institutions has eroded, that we are more concerned than ever about our culture of poverty with its persistent underclass of welfare recipients and unemployed? Granted, no sensible person would argue that the growth of higher education has *caused* productivity to decline, or welfare rolls to grow, or confidence in our government to wane. Many other factors are at work to explain these unfortunate trends. But if we thought that further education would improve the workings of government or the performance of the economy, surely our recent experience should lead us to pause and reconsider.

In thinking further about the problem, we quickly discover how little we really *know* about the effects of higher education. How do students actually change and grow through their undergraduate experience? How much does college—or graduate school, for that matter—truly help people become better leaders, make wiser judgments, be more productive? In fact, our answers are not at all firm. We *can* show that college graduates are more inclined to vote, run for office, exercise leadership. And it is also true of most demanding jobs that employers prefer applicants with B.A.'s to those who have only a high school education. But do graduates vote more and earn more because they went to college or only because they were more intelligent and energetic to begin with? And do employers really *know* that

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college graduates are more successful employees or do they merely use a college degree as a convenient shortcut, a sorting device to identify applicants who have at least shown enough intelligence and persistence to make their way through four more years of education?

Beyond these troublesome inquiries, skeptics have still more vexing questions to ask. Even if we assume that a college education helps people perform better in demanding jobs, does the economy need more graduates than we would have without expensive federal programs? Although we affirm the goal of opportunities for all, isn't it true that those who really wish to better themselves will somehow find a way to obtain a college education? And if some financial assistance is required, hasn't this traditionally been the responsibility of the states, abetted by private philanthropy to create scholarships for the needy?

These are all legitimate questions. We should ponder them carefully. But as we do, we cannot succumb to that extreme skepticism that asks us to legitimate each federal expenditure by proving its value conclusively and demonstrating its effectiveness empirically. Such requirements are simply not feasible. In estimating the effects of a college education, for example, it is hard to devise truly reliable yardsticks to measure progress. And even if we had them, it would be difficult to isolate the value added by a college education, since it is so hard to find an adequate control group—i.e., a truly comparable group of young people who did *not* go to college. Such difficulties are not peculiar to higher education; they affect most forms of public expenditure. For example, we have no way of being sure that each new bomber and battleship is necessary to our safety, nor can we be certain that the weapons we buy today will help us win the unanticipated wars we may face in the future. All public programs depend on estimates arrived at in the face of inadequate information. Although we should consider the available evidence and make the most of our experience and logic, our ultimate decisions must often remain little more than informed and plausible guesses.

From this perspective, what can we say about the need for higher education? Is it growing? Is it overrated? We cannot be certain, but such evidence as we have strongly suggests that the need is increasing steadily.

To begin with, there is a widely shared perception that the tasks of leadership in all walks of life are becoming more difficult. Whether one looks at legislators, high public officials, business executives, hospital directors, college presidents, or school principals, one has a sense of mounting complications—more information to assimilate, more factors to consider, more sophisticated techniques to utilize, more constituencies to satisfy. We have only to look at Harvard's own record of executive education to see the effects of these developments. Starting several decades ago with business executives, the demand for mid-career training has gradually spread to lawyers, judges, health care administrators, high school principals,state and local officials, even newly elected congressmen and mayors. These people do not come to us to relax or to savor Harvard, for we often work them harder than our regular students. They come because their jobs are growing more difficult and they are looking for a framework, a method of analysis, a chance to search with colleagues for some systematic approach that will help them meet professional challenges that seem to be constantly growing in difficulty.

This mounting complexity—with its demand for greater breadth, greater knowledge, and greater sophistication of technique—creates an urgent national need to identify as many talented students as we can find and give to each the best preparation we can offer. Only then can we maintain a sufficient pool of able people to fill a growing number of key positions that already tax human capacities to the utmost. Since almost all leadership positions require at least an undergraduate education, the attempt to develop talent presupposes an effort to encourage every young person of unusual ability to enter college, and probably to obtain suitable graduate or professional training as well.

If we look beyond key leadership positions to the labor force as a whole, the need for expanded educational opportunities seems equally clear. In the past thirty years, the percentage of professionals in our work force grew appreciably, as did the proportion of managers and administrators. In contrast, the percentage of blue-collar workers dropped and that of farm workers fell precipitously. To be sure, the service sector has also expanded with its waiters, salespersons, taxi drivers, and others holding less skilled jobs. But service occupations require large fractions of highly skilled people—almost twice the proportion, in fact, as the manufacturing sector. Labor Department projections suggest that these trends will continue in the foreseeable future.

Various groups in the work force essential to national needs illustrate these tendencies especially clearly. In the military, for example, 42 percent of all Navy billets called for highly skilled personnel in 1980, as opposed to 23 percent in 1945. In competing for world markets, we likewise perceive the critical role of products, such as computers, aircraft, and precision instruments, that require advanced skills and large numbers of people trained in science and engineering. As other nations continue to develop, with wage levels well below our own, our ability to compete is bound to call for increasing emphasis on sophisticated fields of endeavor where advanced technology and education are the key ingredients. In the words of two economists, Eli Ginzberg and George Vojta:

> The U. S. cannot maintain its position among the industrial nations of the world unless it pursues policies that encourage the greater use of resources in which the country has gained a comparative advantage as a result of its generous investment in human capital, such as research and development, management and organization, the development of new products and improved services ranging from financing to marketing.

Is a college education truly important in meeting these needs? We may not be able to *prove* that it is, but a great many people have relied heavily on that assumption. Millions of college students are currently enrolled in some form of vocational major, presumably because they believe that such training will equip them for a better career. It is also virtually impossible today to be a business executive, an engineer, a doctor, a lawyer, a teacher, or a military officer without a college degree, typically in the liberal arts. One must assume that these professions have not put such emphasis on an undergraduate diploma merely as a formality or guild restriction but rather because of a strongly shared belief that a college education provides a useful foundation for a successful career. Similarly, it would be strained to assert that employers prefer college graduates for many demanding jobs simply as a sorting device; there are other techniques that would work better for this purpose if an undergraduate education did not seem to enhance the performance of employees in these positions.

It is true, of course, that the premium paid to college graduates declined during the 1970s, since enrollments were high while demand in many occupations requiring the B.A. tended to stagnate or decline. These trends might lead us to wonder whether we may not be enrolling *too many* students in college, thus casting doubt on any federal program to increase the number further. Yet even in the 1970s, the economic return on a college education continued to be substantial. And in the 1980s, the demand is likely to rise appreciably.

During the next fifteen years, the number of 18- to 21- year-olds in this country will undergo an unprecedented decline of more than 20 percent while the need for college-trained people continues to increase. As the supply of young people diminishes, we will have to be particularly energetic in helping enough highly talented students to acquire the best available education in order to maintain an adequate pool of outstanding people for particularly important positions. At the very least, we should be careful not to create higher economic barriers to higher education, since we will presumably need a greater, not a lesser, proportion of college-trained people in a generation that is so much smaller than its predecessor.

We have traditionally believed in education as a means not only of increasing productivity and economic growth but of achieving the social goals of promoting social mobility and allowing individuals to advance according to their merits. On this score, the case for attending college is even simpler. Do we continue to believe, as a national ideal, in maximizing individual opportunity and minimizing rigid barriers of social class? If so, access to college is indispensable, because so many of the most desired occupations require at least a college education (and often a professional degree as well). In addition, we should avoid policies that would relegate students of modest means to the lowest cost institutions, since such a result would hamper young people in advancing as far as their talents permit and would also tend to segregate our colleges and universities according to social class.

These arguments take on particular force in the context of our continuing struggle to overcome the problems of race in our society. No one can feel confident in prescribing exactly how we can finally succeed in this effort. But surely everyone will agree that it cannot be helpful to continue, as we did until the mid-1960s, with virtually no minority persons in positions of leadership and with less than 2 percent of our doctors and lawyers and less than 3 percent of our engineers, our scientists, and our college professors being black.

However clumsily administered, our national commitment to affirmative action is based in part on the premise that the presence of more minority persons in leadership positions in our professions and major institutions will help build 11 bridges to increase understanding and give encouragement and motivation to other minority youth who will follow. We cannot be certain that this prescription will work. But there are no alternatives that offer as great a prospect for success, and it would be absurd not to do our best to make the strategy succeed. If it is to work, however, it will require a continuing effort to make higher education readily accessible to minorities along with other promising young people who might otherwise find it difficult to attend.

Assuming we agree that there are important public benefits to be expected from encouraging qualified students to pursue a higher education, it does not automatically follow that the *federal government* has a responsibility to intervene. Why should we not leave the task where it was traditionally left—in the hands of individual students and their families, supplemented by the efforts of the various states and the generosity of private benefactors?

Of course, almost all students do contribute a substantial share of the cost of their education. Even if they come from the lowest economic group, they must either take out loans or pay for part of their expenses by working, and generally both. Certainly, this has long been the case at Harvard. Throughout the eighteenth century, the administration would not offer scholarships to cover all of the costs of attending the College on the ground that such assistance would be morally corrupting. Today, whether or not Harvard students receive help from the government, even the poorest must contribute at least $1,900 per year through self-help (i.e., employment earnings) and another $2,000 by seeking loans. In theory, of course, it would be possible to ask students to pay *all* of their expenses by working and borrowing. If worst came to worst, a student could delay his education for several years to earn enough to pay for his college expenses. And some would not be troubled by this idea. As Senator Orrin Hatch has put it: "I am not at all offended that it may take many students five or six years to obtain their baccalaureate nor that more sweat may be generated along the way."

In practice, however, there are several problems with this approach, not only from the student's point of view but from the perspective of the public interest as well. To begin with, most high school graduates would have to work for a very long time to earn enough to defray their college costs. Many of them might not even find a job that would allow them to save much money in a time when teenage unemployment is over 20 percent and exceeds 50 percent for black youths in many cities. Young people can always seek loans, but without some sort of government program, banks will normally refuse credit to finance a college education unless they know the family and feel confident that it has the assets to repay the debt. Moreover, human nature being what it is, many students of modest means will not be farsighted enough to forgo present earnings and incur large debts at high rates of interest to prepare themselves for careers that offer a distant prospect of comfortable salaries after long years of study.

For all these reasons, the nation cannot safely adopt a laissez-faire attitude toward higher education and expect students to acquire the amount and type of education they need to meet the needs of the society. On the contrary, there is good reason to believe that many students, especially from poor families, would not attend college without some form of public aid. Thus, a careful study by David Wise of our School of Government estimates that more than half of all students from families with incomes under $12,000 would not enter college in the absence of a Basic Educational Opportunity Grant. The same will be even truer of aid at the graduate school level. If students from low- and moderate-income groups must delay their education in order to earn their way through college, they may be reluctant to go to work again simply to finance their professional training, especially in fields that require many years of study or lead to occupations that do not offer high salaries. One can always condemn such students for not trying hard enough. But whether or not these complaints are just, the fact remains that from the public standpoint, we will have lost whatever benefits the nation might have gained from having these individuals receive the added education they need to make their greatest social contribution.

Even granting the existence of a public need for some form of student aid, is it not proper to ask the states to assume this responsibility? After all, they have traditionally played the major role in securing advanced education for their residents. In each of the fifty states, extensive systems of higher learning have gradually developed to include institutions ranging from community colleges to world-renowned universities. In 1980 alone, a total of $21 billion was appropriated to operate these vast networks.

Notwithstanding these efforts, the states, by and large, have not succeeded in facilitating access to college and graduate school for all deserving students. In 1965, before the 13 enactment of the Higher Education Act, federal officials asserted that more than one hundred thousand talented youths of modest means were not continuing beyond high school. This estimate is probably understated. In fact, approximately one-third of all high school seniors from the highest ability quartile and the lowest economic quartile have traditionally failed to go on to college. Despite the low tuitions at public institutions, many of these students presumably cannot afford to forgo full-time employment and pay the living costs and fees required to attend colleges and universities. Although many states have provided some scholarship funds, the average awards in 1980 ranged from $313 in Georgia to $1,421 in California, sums that are hardly sufficient to induce many needy students to attend.

There are several reasons why many states are likely to provide less than an optimum amount in scholarships and student loans. In the first place, even if broader educational opportunities will stimulate growth and productivity, a single state cannot be certain to capture all of the resulting benefits, nor will it pay the full penalty for underinvesting in higher education. A state that brings college and graduate school within reach of all its citizens will see a substantial fraction of them leave the area for employment elsewhere. Conversely, a state that offers much less generous opportunities may not suffer all of the consequences, since skilled manpower can be recruited from beyond its borders. In these circumstances, no state will necessarily feel that its economic interests require it to achieve the levels of access which might be optimal for the nation as a whole. There is reason to believe, moreover, that temptations to skimp on funds for higher education will grow stronger in the future. Most states are laboring under heavy financial burdens, especially now that the federal government is cutting back on many programs that assisted them in the past. With college-age populations declining, most legislatures will also feel diminishing pressure from their constituents to spend large sums for higher education. Already, tuitions for public universities are climbing more rapidly than the cost of living while scholarship funds are failing to keep pace.

Just as the states may not see to it that public institutions achieve all of their important social objectives, so can private philanthropy fall short of insuring access and quality in our independent colleges and universities. During the past fifteen years, private institutions have greatly increased their efforts to attract gifts. Even so, faced with rising inflation and lagging stock markets, private colleges have had to raise tuitions more rapidly than the cost of living while still being forced to defer needed maintenance of their buildings, cut back acquisitions to their libraries, and allow their faculty salaries to decline substantially in real terms. Without the growth of federal aid, it is clear that these colleges would have had to limit the scholarships and loans they provide to needy students while probably having to lower the quality of their educational programs as well. Although one can always exhort donors to do more, the prospects for success are not bright. Uncertainties in the economy are likely to have a depressing effect on philanthropy. And most experts predict that the administration's tax cuts will inhibit private gifts by reducing the tax savings to donors, especially the wealthiest benefactors who supply the bulk of total giving to higher education.

For all these reasons, there is an important though supplementary role for the federal government to play if we are to satisfy the public need for recruiting talented leadership, maintaining a suitably educated work force, and providing social mobility and opportunities for individuals to progress according to their merits. In short, the federal government must be the ultimate guarantor to secure reasonable access to colleges and graduate schools. Moreover, although the government may not have an obligation to support colleges and universities, it does at least have a strong interest in avoiding sudden or drastic shifts in student aid that would significantly threaten the strength and quality of higher education. These are not responsibilities that Washington should assume grudgingly. In an interdependent society, the quality of our leadership, the performance of our economy, the fulfillment of our commitment to equal opportunity, and our desire for an informed and involved citizenry are not merely state and local concerns. They are national objectives, and the national government has a part to play in seeing to it that they are achieved.

Evaluating Federal Policy

With these aims in mind, how can we assess the programs that existed at the end of President Carter's term and the new directions now proposed by the Reagan administration? In answering this question, we can proceed more clearly if we separate the policies pertaining to undergraduate education from those that apply to graduate and professional training.

Undergraduate Education. The foundation of federal policy from 1973 to 1980 was the Basic Educational Opportunity Grant. Its chief purpose was to encourage more students of modest means to go to college by reducing the cost. As far as one can tell, the program has made progress toward this goal. Recent studies suggest that as many as half of the recipients from families earning less than $12,000 per year would probably not have continued their education without federal aid. Almost all of them chose to attend two-year colleges or technical and vocational institutes where they could presumably prepare for better and more productive jobs.

Despite these gains, one can criticize the Basic Educational Opportunity Grants on at least two counts. In 1978, Congress liberalized the eligibility requirements to authorize payments to students from families earning up to $25,000 per year. This step greatly increased the cost of the program. But studies indicate that almost none of these newly eligible recipients decided to continue their education because of the grants; virtually all of them would have gone to college anyway. As a result, the effect of the liberalization was not to improve access but simply to put more money in the pockets of middle-income families and relieve the scholarship budgets of a number of institutions. Conceivably, the grants may have enabled some students to choose a college where they could acquire an education better suited to their needs. Nevertheless, we have no evidence that this is so, and the small grants given to middle-income students would not appear to exert much effect on their choice of institution. As a result, we are left with an impression that the added expenditures brought public benefits that were only marginal at best.

The second problem with the program was that it made no effort to avoid giving grants to students who ultimately failed to complete their education. This is no small problem since approximately 40 percent of all students entering college do not receive a degree. Although those who drop out may not completely waste their time, it is safe to say that much of the value the government seeks by providing opportunity grants will be lost on young men and women who fail their courses or leave college prematurely. Of course, there is no sure way of predicting which students will fall by the wayside. But we do know that students with low College Board scores and/or a low class ranking in high school are much more likely to drop out than students who do better according to these measures. Indeed, students in the lowest quartile of their high school class with a combined College Board score of 700 or less will have only a 30 percent probability of finishing their course of study. With these odds, it would be wise to consider some way of targeting grants on those who seem likely to complete the programs they enter. Otherwise the possibility that the recipient would have gone to college anyway, coupled with his low probability of receiving a degree, produces very high odds that the grant will not achieve a significant public purpose.

In sum, the previous program succeeded in improving access but was more expensive than it had to be. In these circumstances, what can we make of the Reagan administration's policies? Although we cannot yet tell just what the government has in mind for the federal grants, the rapid, severe cuts originally proposed by the Office of Management and Budget (OMB) make one wonder whether some officials would not prefer to do away with the grants altogether. That would be a serious mistake. Clearly, a properly crafted program can serve a useful purpose in inducing substantial numbers of low-income students to attend college and receive an education that promises to enlarge their opportunities and enhance their contribution to the economy. Even to cut the program back, as OMB originally proposed, to cover only students from families earning less than $7,500 per year seems far too drastic, since it would exclude large numbers of young people for whom an award will make the difference in deciding to acquire further education. The final budget proposals are much better in this respect, since they would permit grants to families earning up to $16,000 per year. Unfortunately, however, the maximum grant has been slashed substantially while educational costs have continued to rise rapidly. Such cuts seem counterproductive, since they are likely to sharply reduce the number of students who are actually persuaded by a federal grant to continue their education, thus undermining the primary purpose of the program.

Rather than save money in this way, the government could lift the maximum grant substantially and impose some modest threshold of College Board score and high school ranking to increase the odds that recipients will complete their educational programs. Since this requirement may seem too arbitrary, it might be even better to convert the entire program to loans and then cancel repayment for all recipients who finish their course of study. By this device, the government 17 could make certain that all of its grants go only to students who actually achieve some significant educational goal. Such measures may seem harsh. But limited funds will surely produce greater results if they are targeted in this fashion instead of being spread thinly over a larger number of students who may never use their grants to acquire enough education to benefit themselves or the economy.

At least as important as the federal grants is a program to insure that students have access to credit to finance their education at terms they can afford. Most banks and credit sources are presently unwilling, without federal assistance, to loan money to college students; the process of collecting the loans is too burdensome and the risks involved too high. Hence, some form of federal intervention is required, or hundreds of thousands of students will be unable to enter the college of their choice, or indeed to attend any college at all, even though they are quite willing to pay the cost.

To solve this problem, Congress developed an elaborate system whereby the government guaranteed loans of up to $2,500 per year at subsidized rates of interest (9 percent) and undertook to relieve students of the burden of paying interest during the time that they remained in school. This program plainly succeeded in making credit available to students. By 1980, over three million undergraduates were borrowing under arrangements of this sort; for many of them, federal loans made a critical difference in enabling them to achieve the education they desired. Once again, however, the program reached levels of liberality that are exceedingly hard to justify. In the amendments to the Middle Income Assistance Act of 1980, Congress actually extended eligibility for subsidized loans to all families *regardless of need*. As a result, the wealthiest families found it profitable to seek a college loan at 9 percent and invest the money saved at substantially higher rates. This result was indefensible, even in affluent times.

The Reagan administration has already acted to cut back subsidized loans by restricting eligibility to students who can demonstrate need. This step is appropriate, and even the current rules could be tightened somewhat further, as the government now proposes. But the administration has gone far beyond this point by urging steps that would chip away at the in-school subsidy by charging each student a 10 percent origination fee while bringing the interest rate from 9 percent to market levels commencing two years after graduation. The effect of these changes would be to increase the interest cost on student loans by almost 50 percent.[*]

Conceivably, these measures will have no irreparable effects. Students may find some way to scrape up the few hundred extra dollars they need each year to cover the government's new origination fee. And faced with the prospect of higher rates of interest, many may work full time to pay off their loans within two years after graduation—provided they can find a sufficiently remunerative job, have no added debts or dependents, and face no other pressing obligations. No one can be certain that these adjustments will not occur, nor is it possible to locate the point at which the burdens of financing an education will become too severe. Nevertheless, as the government continues to reduce the in-school subsidy and increase the interest charges, the risks will mount and their nature will be clear. Some students may decide not to attend college. Many will have to work more hours than they should in college to earn enough to pay the origination fees or other charges. Many more will feel obliged to attend lower-cost institutions in order to minimize their debt burden.

These dangers do not trouble everyone. In the words of Senator Hatch: "Many middle-income students protest that without assistance they will be forced into presumably substandard state schools and barred from the high-priced glamour institutions. I am basically unsympathetic. . . . A student committed to learning can obtain a fine education at even a less than 'glamourous' school." Stripped of its loaded adjectives, Senator Hatch's statement suggests that the government need not be concerned over restricting students in their choice of college. For some students, this observation is undoubtedly correct. In fact, one can think of individuals enterprising enough to educate themselves without ever going to school at all. Yet I suspect that most senators *do* believe that it matters that their own children go to the college of their choice. Certainly, it matters a great deal to most parents and to their children as well. It matters because, despite the guesswork and uncertainty involved, we have a strong conviction that colleges do differ significantly and that some will be much more beneficial than others for the education and development of our own sons and daughters. In the same way, we should assume that some loss of educational quality will follow from federal policies that seriously restrict the choices available to the student population as a whole.

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[*] The interest cost on a $1,000 loan under the current program would be $570.40 over the ten years of the loan. Assuming a market rate of interest of 14 percent, the total interest charge would rise to $845.80, an increase of 48 percent.

Similarly, although most of us suspect that our children could work a number of hours each week without harming their education, we are reasonably sure that beyond a certain point, working at an outside job will begin to diminish the value of a college education by taking too many hours away from study and by making excessive inroads on all the activities and human relationships that enable the college years to add significantly to growth and personal development. Since a majority of students on financial aid are already working part-time (and a very large majority are employed in the summer), one cannot be entirely sanguine about the effects of forcing them to work longer hours by heaping higher financial burdens on them. Indeed, in a time of high unemployment—and with the government seeking drastic cuts in campus work-study programs—one cannot even be sure that needy students will succeed in finding jobs. For these reasons, we should be skeptical of policies that could cause students to work longer hours or abandon the college they would prefer in favor of one that happens to cost less. Such measures threaten to impair the quality of education that needy students receive and thus may adversely affect not only our young people but the national interest as well.

Another unfortunate effect of higher credit costs is that they will cause many private colleges, and even state universities, to become more segregated according to economic class as fewer students from low- and moderate-income families find it possible to attend. Already, colleges as well endowed as Wesleyan and Yale have stated that they may no longer be able to accept the ablest applicants regardless of their financial circumstances. This trend will be further accentuated by the administration's proposal to eliminate Supplemental Educational Opportunity Grants for needy students attending higher priced institutions. In the eyes of many, the end result will be unfortunate both for wealthier students and for those who no longer can attend the school of their choice. Undergraduates often regard the diversity of their fellow classmates as among the more important experiences of their college years. Donors presumably give scholarships for similar reasons. And in a society that prides itself on avoiding the drawbacks of a rigid class system, no

one can be comfortable with a change in policy that might take us a significant way toward relegating the poorest students to community colleges while transforming many of the most sought-after institutions into privileged enclaves populated chiefly by the well-to-do.

We should also be aware that a policy which eliminates supplemental grants and substantially increases the cost of educational loans puts private colleges and universities at a particular disadvantage because of their higher tuition charges. To this concern, one can quickly retort that it is not the business of the federal government to keep individual colleges afloat. While that statement is undoubtedly correct, the problem is not so simple. In the first place, academic institutions are not corporations competing in an open market. If private colleges cannot survive, it may not be because they are less efficient or provide a poorer education than their counterparts; they are likely to fail because they do not have the benefit of large state subsidies to keep tuitions low. In addition, while the federal government has no necessary concern for the fate of any single institution, it does have a strong interest in the system of higher education as a whole, since that system is essential to the achievement of many national goals.

Throughout our history, the mixture of public and private colleges and universities has been a major source of strength for American higher education. Extensive networks of state institutions have not only produced some outstanding universities; they have provided the means for making certain that a wide range of public educational needs are satisfactorily met. If public colleges and universities did not exist, we would clearly have to invent them. But private institutions have likewise made important contributions. They have offered a diversity of choice by providing small colleges, denominational colleges, black colleges, single-sex colleges, experimental colleges—a diversity that has been important in accommodating the varying needs and aspirations of a large, heterogeneous student population. Private institutions have also permitted many more centers of initiative and experimentation in a field of endeavor that is inherently imperfect, intangible, and in need of new ideas. Finally, private universities, aided by their independent status, have consistently accounted for most of the nation's highest ranking academic departments (and professional schools as well) even though they enroll only 23 percent of the nation's students. Such achievements have not only made a contribution 21 in their own right; they have also set standards to which public institutions can point in order to protect themselves from ill-advised political efforts to resist innovation, cut salaries and staff, or curtail expenditures for libraries and other academic facilities. All in all, therefore, the peculiar success of our system of higher education is due in large part to the reinforcement and the stimulus that public and private institutions give to one another.

In the past thirty years, the enrollment of students in private colleges and universities has shrunk from more than one half to less than one quarter of the total undergraduate population. In the next generation, private institutions face serious problems caused not only by high inflation but by the prospect of severe enrollment declines resulting from a dwindling college-age population. At such a time, the government should think very carefully before imposing greater burdens on these colleges by sudden, drastic changes in its financial aid policies. Harvard will surely survive, as will Princeton, Stanford, or Yale (although we will all be hard-pressed to maintain our policy of admitting every qualified student regardless of his or her financial circumstances). But many other private colleges may have to close down or substantially reduce the quality of their programs. If the government does not take care, therefore, its proposals could permanently weaken one side of a partnership that has played an important role in lifting American higher education to a level unequalled in the world. And that would be an odd result from an administration so committed to a vigorous private sector.

With these considerations in mind, one can evaluate the administration's proposals in the following terms:

1. With respect to basic grants, the administration is on sound ground in seeking to restrict awards to students from low-income families. Such grants are plainly intended to increase access to higher education, and there is no good evidence to suggest that students above a modest income level will be affected in their decision to enter college by the existence of a federal stipend. On the other hand, if the government wishes to use its funds to the maximum effect, it would do well to offer higher grants and restrict them to students who can succeed in completing their chosen course of study.

2. In the case of guaranteed loans, the administration is likewise justified in offering subsidized credit only to students

who can actually demonstrate that their college costs exceed their means. In stringent times, it may also be defensible to eliminate subsidized interest rates after a reasonable period following graduation.* Even with the maximum accumulated loan of $10,000, most college graduates can earn enough to pay back their indebtedness in a few years. Granted, those who wish to pursue their education further may have to delay their plans. But this is not an unreasonable demand to make in a time of austerity; in fact, it may even be beneficial for many students to gain the experience of working for a time before finally committing themselves to graduate or professional school.

3. The most troublesome measures advanced by the administration are those that would chip away at the in-school loan subsidy, severely reduce work-study programs, and eliminate supplemental grants. These measures would have serious effects, but it is important to be clear about what those results are likely to be. There is no strong evidence that the proposals would keep students from attending college, especially if the basic grants are increased, for available data suggest that only grants to poor students have much effect on the decision to pursue some sort of postsecondary education. Nevertheless, such initiatives could well have an adverse impact on the quality of education that students receive. They would restrict choice by discouraging students from attending the more expensive public and private colleges. They would segregate student bodies by forcing low- and moderate-income students into less costly institutions. They would also force students to take more time from their studies to pay for their college costs while restricting their employment opportunities, especially the more convenient campus jobs made possible by work-study programs.

The administration's proposals would further affect the quality of education by threatening the standards and even the survival of many colleges. During the 1970s, subsidized loans, work-study, and supplemental grants may not have accomplished much to increase access to higher education. But they did enable most colleges to weather a difficult decade by allowing them to raise tuitions without intolerable student assistance costs. To shrink federal programs to the extent now proposed would seriously deplete the financial aid resources of many institutions at the very time when their economic difficulties will be compounded by a sharp drop in the college-age population. For leading public universities, the effects will depend on the reactions of their state legislature. Under present conditions, however, the likely consequence of such reductions will be to reduce access or to lower the quality of educational programs, as many states conclude that they cannot replace all that Washington has taken away. For private colleges, the risks do not merely involve an erosion of quality; many colleges may actually have to close their doors if they are not blessed with large endowments or ample applicant pools. Whether these results are warranted by the savings to the federal budget is clearly a matter of opinion. But at a time when investments in human capital seem more important than ever to the nation, the drastic cutbacks proposed by the administration are highly questionable. In seeking to correct a short-term fiscal problem, the administration threatens to lower the quality of many students' education and to weaken colleges and universities to a degree that could do long-term harm to the public interest.

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* I would prefer to extend the period of subsidized interest to at least three or four years following graduation, since the two-year period proposed by the administration seems too brief to enable many college graduates to repay up to $10,000 in accumulated loans.

Graduate and Professional Education. Turning to student assistance beyond the college level, we find somewhat different policies that have changed markedly over the years. When Congress first acted in the wake of the Sputnik launching, its chief concern was to expand particular fields of specialized training that seemed especially vital to the national interest. Accordingly, the government made low-interest loans available to Ph.D. candidates and international specialists. Later on, students who became school teachers could convert their loans to grants while heavy subsidies were offered to medical students to enlarge the nation's supply of doctors. Commencing in the 1970s, however, the emphasis shifted to undergraduate education with the overriding goal of opening our colleges to all students regardless of their financial means. Grants to doctoral students were reduced to very modest levels. School teachers were no longer relieved of their obligation to repay student loans. By 1981, the only major program available to graduate and professional school students was the same subsidized loan program provided to undergraduates.

As previously mentioned, this loan program was gradually enlarged beyond reasonable levels. Congress extended generous subsidies not only to students of modest incomes but to the children of wealthy families as well. Such liberality is hard to defend, especially in the present fiscal climate. As a result, the government stands on firm ground in cutting back subsidies to restrict them to needy students.

More recently, however, the administration has gone much further by proposing to eliminate the regular Guaranteed Student Loan program for graduate students and, instead, to provide credit up to $8,000 per year at a 14 percent rate. Interest would be payable immediately with no subsidy while a borrower remains in school. If enacted, these recommendations would raise the total cost of graduate student loans by up to 67 percent while increasing the interest charges by a full 142 percent.* Worse yet, few students would be able to borrow at 14 percent—or even borrow at all—since banks are normally reluctant to make educational loans if the government will not pay the interest costs while the students are still in school. Thus, most poor and middle-income students could be effectively barred from entering professions that require a substantial period of training. Without loans, needy students have no way of amassing the tens of thousands of dollars required to become a doctor, a scientist, an architect, a dentist, or a college professor. The results would be intolerable not only for the individuals affected but for the national interest as well.

Even if the administration's program can be made to work, graduate students will face much stiffer credit terms than those available to undergraduates. It is not immediately obvious why Congress should approve this result. Graduate and professional students make up less than one-sixth of total enrollments and account for less than one-third of all guaranteed loans, so that the cost of subsidizing their loans is relatively low. In addition, graduate and professional education is particularly important to our economic and social progress, since it is here that students prepare specifically for such key occupations as medicine, law, teaching, scientific research, business administration, and many others. If there is any level of education in which it seems most important to break down economic barriers for talented, needy students, it is in the graduate and professional schools. Is there any reason, then, to treat these students more severely apart from the obvious fact that they are less numerous and hence less politically influential?

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* Under the present program, a student borrowing $1,000 would pay $570.40 in interest and fees over the ten-year term of the loan. The administration's proposals would lift the total interest burden to $1,423.60.

One possible reason for disfavoring graduate students is that many of them seem more able to take care of themselves. As President Eliot declared generations ago, "Ordinary scholarships . . . should be given sparingly in graduate schools, because by that time an energetic student ought to be able to provide in large part for his own support." Although the costs of graduate education have grown enormously since Eliot's day, his remarks still have considerable force for some professional fields. In business and law, for example, students can look forward to substantial salaries immediately after graduation; many of them from the leading schools may actually earn more than $40,000 in their first year of work. Even while they are still in school, summer employment is often available at attractive salaries, thus making it possible for them to begin paying interest on their loans during the years prior to graduation. For these students, then, the pressing need is to have access to credit but not to receive large federal subsidies.

Unfortunately, there are many other important occupations in which mere access to credit is not enough. Some of these fields may offer attractive salaries but only after a prolonged period of preparation. Medicine is the prime example. With tuitions in many schools exceeding $10,000 per year, needy students will have to borrow heavily to complete their training. Since they will often emerge from college already owing a substantial sum, they may be fearful of accumulating much greater debts at high rates of interest over the many years required to prepare them for practice. Unless they receive more liberal credit, many poor students will decide that they simply cannot afford medical school. Even those of moderate means may feel impelled to go to the lowest cost school they can find and to enter lucrative specialties rather than fields, such as primary care, that are more urgently needed by the public. None of these results will serve the national interest.

Even more serious problems for the country will arise in occupations that are socially important yet provide relatively low levels of compensation. Teaching affords one illustration; the ministry another. Both fields are already attracting a smaller pool of talent than seems desirable. In public school teaching, for example, salaries are relatively low, conditions of work have deteriorated, and able women—who contributed so much to the profession for so long—can now find opportunities in much more lucrative callings. As a result, the College Board scores of students entering teacher training have sunk far below the national median.[*] Higher interest costs on student loans will surely aggravate the problem, since many young people, already burdened with undergraduate debts, will not have confidence that they can earn enough as school teachers to repay a further round of loans with annual repayment charges far above those applicable in the past. This prospect should be daunting even to conservatives, such as Senator Hatch. In his words, "Whatever form our responses take we must spare no effort to enlist from among our most effective motivators, our most perceptive analysts, our most skilled technicians, from among our best and most highly principled people in the broadest sense those who will instruct and, in many aspects, shape our youth." Alas, the abilities of the students we are now recruiting to "shape our youth" over the next forty years fall far below the senator's expectations. And at a time when the public is already disenchanted with the quality of education in many of our public schools, the current administration's proposals will only make matters worse.

A final example, of particular concern to Harvard, involves the Ph.D. and the recruitment of talented young people to become the college teachers, the basic scientists, and the scholars who will serve us for the next generations. The situation facing our Ph.D. programs is somewhat different from those previously described. Jobs are rapidly drying up because of the expected drop in student enrollments resulting from the demographic trends earlier described. Because of this sharp decline, universities are enrolling far more Ph.D. candidates than can possibly find academic jobs, and this situation may well persist for a long time to come. Even so, while doing our best not to increase the number of Ph.D. students, universities must attract at least a few thousand students each year of truly outstanding talent or the quality of science and the advancement of knowledge are bound to decline. In short, a sound strategy for graduate education must embrace two seemingly irreconcilable goals: to recruit fewer students but still enroll a substantial number of the very highest ability.

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[*] In 1976, the SAT verbal scores for college seniors majoring in education were 46 points below the average for graduating seniors, while math scores fell 52 points below the average. Of 16 occupational groups, only office-clerical and vocational-technical had lower verbal scores and only office-clerical had lower math scores.

At present, the prospects for maintaining high levels of quality are not good. The dismal prospects for an academic career are undoubtedly causing able biology students to become doctors, able history majors to go to law school, able political science concentrators to attend business school. The effects are already visible at Harvard, as at other universities. Fifteen years ago, over 80 percent of our *summa cum laude* seniors expressed an intent to pursue the Ph.D. Last year, the figure had dropped to 31 percent. Worse yet, we should not forget that much of the postwar lustre of American science and the preeminence achieved by our leading universities were actually due to the influx of outstanding scholars and scientists who fled from Europe after 1935. This stream of talent has dwindled markedly and will probably decline still further. In these circumstances, we have a major problem on our hands if we mean to uphold the standards of our faculties around the country.

In view of these difficulties, the response of the current administration is not encouraging. Facing many years of graduate study, and with uncertain job prospects at the other end, talented students will be even less willing to pursue the Ph.D. if they must pay much higher costs for the loans they accumulate over several years of study. Moreover, the administration has also attempted to cut back the last remaining graduate student grant program by urging reductions in the number of scholarships offered each year to the most outstanding students entering doctoral programs in the sciences. No one can *prove* what effect such a measure would have on the quality of people who decide to become scientists. Nevertheless, in view of the critical importance of research to the nation and the problems of maintaining the quality of our graduate student population, the risk is hardly a prudent one to take. Any adverse effects will be irremediable, for talented students who have once decided to enter other fields are not likely to return to graduate school later on. They will be permanently lost to science.

These difficulties illustrate the complexity of student aid beyond the undergraduate level. Far more than college, graduate and professional education is made up of many different fields with widely varying characteristics and problems. In a time of austerity, when generous aid cannot go to everyone, it takes great imagination to conceive of policies that will fit these differing situations in a manner that serves legitimate national aims.

Several possibilities come to mind. For example, the government might consider some form of contingent repayment plan that would require borrowers to pay back loans for a stipulated period of years with the payments being set at a small, fixed percentage of taxable income. Such schemes would offer various advantages. They would minimize payments while students are still in school and unable to assume large interest charges. They would keep the cost of repayment at manageable levels for teachers, ministers, and others performing socially important tasks that yield low levels of compensation. At the same time, they would allow the government to recover all or most of its costs while relying on the federal tax system to minimize the burden of administration. Such plans do place heavier burdens on borrowers who eventually earn larger incomes. If this feature seems politically unacceptable, the government could at least impose a ceiling on the percentage of income that a borrower would have to devote to repaying loans—or even defer repayment by students earning less than a stipulated minimum per year. As with contingent repayment plans, the intent of such measures would be to keep able students from turning away from important occupations with relatively low salary levels through fear of being unable to discharge their debts.

Congress would also do well to reconsider the use of federal scholarships in limited situations where the nation has an interest in increasing the supply of particular specialists—as in the case of M.S.'s and Ph.D.'s in computer science—or where the supply of students is adequate but the national interest requires a continuing flow of exceptionally gifted people, as in the basic sciences or university teaching. Such grants should help to attract able students who are interested in these fields but deterred by the large debts they will incur during the course of their studies. To be sure, a substantial fraction of the awards will probably go to students who would have chosen such careers in any event. Even so, much of this support will doubtless help to relieve the scholarship budgets of the schools that talented students wish to attend and thus will work indirectly to strengthen the best graduate and professional schools. Far from wasting public funds, such aid offers a simple way of preserving quality education in fields of particular national importance, and at a time when financial pressure might otherwise endanger the maintenance of high standards.

Regardless of the specific programs ultimately chosen, the national interest plainly demands some workable scheme to insure that graduate students can actually have access to credit to finance their studies. Moreover, the nation's special need for talent in particular occupations will require more than measures that simply seek to save money by doing away with graduate scholarships and raising the cost of student loans to near market levels. As we have seen, these needs can be met in creative ways that will cost much less than the programs currently in place. Under the administration's proposals, however, we run a grave risk of impoverishing important fields of endeavor that are already short of talent while restricting other professions to students wealthy enough not to need large loans.

CONCLUSION

This brief review reaffirms the public interest in maintaining strong financial aid programs in our colleges and universities. In today's world, we must encourage all students to acquire the education they need to make their fullest social contribution. Experience suggests that we will not achieve this goal by relying simply on private initiative or even on the support of state governments and private benefactors. Instead, the federal government must ultimately guarantee that all students have access to credit at terms they can afford, that poor students receive the help they need to induce them to continue their studies, and that able young people are not deterred by educational costs from entering modestly paid careers that serve important public interests.

Despite these needs, we are clearly in the midst of a profound shift in our attitudes and policies toward the federal role in human development and higher education. From a time of extreme liberality—where even the affluent could receive federal largesse—we have suddenly entered an era of severe retrenchment that promises a substantial rise in the cost of higher education for millions of students from low- and moderate-income families. This rapid swing, of course, reflects an equally profound change from a national mood of ebullience and growth to a feeling of austerity marked by a widely shared concern that we have been living beyond our means.

Such swings in national attitudes are inevitable. But those who guide our country should not overestimate the permanence of these moods or exaggerate the degree of change that has actually occurred in our underlying situation. It was a mistake to use the taxpayers' money to offer subsidies to well-to-do college students. It would likewise be a mistake to move too far in the opposite direction. The United States is still the most powerful country with the largest economy in the world. It has serious problems, to be sure, but it is important to be clear about what these problems are lest we prescribe false remedies that merely aggravate our ailments.

America faces no threat of immediate collapse or national bankruptcy. It does confront a longer-term danger of losing its vitality, its competitive edge, its ability to find creative solutions to persistent issues that afflict our domestic well-being and erode our position in the world. Our place in the international economy is increasingly challenged by other nations that are vigorous and ingenious in encouraging economic progress. Our society at home suffers from a host of nagging problems, problems of productivity, inflation, unemployment, race, crime, and many more. It may be difficult to know how to attack these issues, or even to perceive how best to begin. In the long run, however, one thing is clear. As a nation, we can no longer depend on the protection of the oceans or on unlimited land and abundant national resources. We must increasingly rely on the abilities and imagination of our people and on the knowledge and discoveries they provide.

It is especially important to keep these needs fully in mind during the next decade. In contrast to the swelling enrollments in colleges and professional schools so characteristic of the 1970s, the 1980s will bring an unprecedented drop of more than 20 percent in the number of college-age men and women. Under these conditions, we cannot take for granted that we will readily find all of the able, well-trained people that a vigorous society requires. At such a time, therefore, it is hardly wise to shift to policies that run the risk of discouraging talented people from developing their abilities to the utmost, from entering important occupations, and, ultimately, from making their fullest contribution to the welfare and progress of the society.

In the words of economists Eli Ginzberg and George Vojta:

> The proposed reindustrialization of an economy dominated by services is an exercise in futility. Americans must unshackle themselves from the notion, dating back to Adam Smith, that goods alone constitute wealth whereas services are nonproductive and ephemeral. At the same time, they should act on Smith's understanding that the wealth of a nation depends on the skill, dexterity, and knowledge of its people.

Put bluntly, the challenge before us is not simply to reindustrialize the economy but to revitalize the entire society. In this endeavor, higher education, and the students it serves, have a critical role to play. At such a time, Harvard should make every effort to maintain the principle of admitting all students according to their talents and promise regardless of their ability to pay. The government should be no less determined in doing its part to preserve sound, adequate programs of student aid. If we mean to recapture our momentum and press forward as a nation, we cannot afford to respond to short-term fiscal problems by restricting educational opportunities and diluting the talents of the very people on whom our future progress ultimately depends.

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It is my sad duty to conclude this report with a list of those, active and retired, among the ranks of the University who died in 1981. They include three former Overseers: Amory Houghton '21, Overseer from 1947 to 1953, whose death on February 21 was noted in last year's report; Alfred H. Barr, Jr., Ph.D. '46, Overseer from 1964 to 1970, who died August 15; and James B. Fisk, JF '36-38, SF '48-49, Gordon McKay Professor of Applied Physics in 1947-48 and Overseer from 1961 to 1967, who died August 10. We were honored to have them in Harvard service.

Necrology

Max Joseph Bulian, Assistant Clinical Professor of Obstetrics and Gynecology, died on September 14, 1981 at the age of 59. He had been the senior staff obstetrician and gynecologist at the Beth Israel Hospital since 1953 and a member of the Medical School faculty from 1962. He also practiced obstetrics privately in Brookline. A graduate of Tufts University and its Medical School, he also was Assistant Clinical Professor there. Prior to his first appointment at Beth Israel he worked with Dr. John Rock at the Harvard Medical School as Sidney Graves Research Fellow in Gynecology. In mid-career, Dr. Bulian's scholarly interests turned to the public health aspects of his specialty; he left clinical practice briefly then to earn the M.P.H. degree at our School of Public Health. Over the years, he headed a well-respected teaching program at Beth Israel and was known for his work in the Boston community and for Massachusetts' Department of Public Health. The Max J. Bulian Lecture Fund at Beth Israel, providing an annual lecture, has been established in his memory.

Arthur Casagrande, Gordon McKay Professor of Soil Mechanics and Foundation Engineering, *Emeritus*, died on September 6, 1981 at the age of 79. He gave 41 years of service to the University and in his pioneering work in the design of earth dams brought recognition to himself and Harvard. In the relatively young engineering discipline of soil mechanics, he made a major contribution by showing simply that its study is crucial to the practice of civil engineering. His professional soil mechanics program in the 1960s brought hundreds of students here to learn from the teachers and engineers he had the ability to attract. Both came because of his notable research work and writings and skill as a teacher. Mr. Casagrande was born in Haidenschaft, Old Austria and educated at the Technical University of Vienna. He came to Harvard in 1932 following association at the Massachusetts Institute of Technology with Professor Karl Terzaghi (who also served on the Harvard faculty) on work for the U.S. Bureau of Roads. Throughout his teaching career, Mr. Casagrande acted as a consultant to the U.S. Army Corps of Engineers for more than 50 flood control, water-conservation, and military construction projects, for which he received the Distinguished Civilian Service Award in 1967. He also consulted privately on foundations, airports, and earth dams throughout the world, including problems connected with the Panama Canal. His brother, Leo Casagrande, who had worked for years with Terzaghi, formerly taught in the Engineering Department at Harvard. 33

Derek Ernest Denny-Brown, James Jackson Putnam Professor of Neurology, *Emeritus*, died on April 20, 1981 at the age of 79. Dr. Denny-Brown, a brilliant researcher who carried out fundamental studies of the nervous system and its diseases, held the Directorship of the Neurological Unit at Boston City Hospital for close to 30 years. His most significant work had to do with spinal reflexes, the definition of the nervous orders of the bladder and rectum, and of hereditary sensory neuropathy (called by some "Denny-Brown Disease"). He was the first person to describe the degenerative changes associated with carcinoma. Born in New Zealand, he studied at Oxford University under Sir Charles Sherrington, developing a physiological approach to neurological problems. This early work, it has been noted, was discernible in his approach years later. He served at the National Hospital and Guy's Hospital in London, then came to the United States to study at Yale in 1936. He was invited to Harvard in 1939 and Boston City Hospital in 1941 but service with the British Royal Army Medical Corps in India and Burma delayed his arrival here until 1946. He came as Putnam Professor and within a short time his training programs here were considered among the finest in the world, his standards the highest. An exemplary physician, teacher, and researcher, he authored nearly 200 papers and four standard texts. A man of remarkable energy, he worked with the New England Regional Primate Research Center following retirement from City Hospital in 1967 and became a Fogarty Scholar-in-Residence at the National Institutes of Health after leaving the Medical School in 1972.

John Desmond Glover, Lovett-Learned Professor of Business Administration, died on February 16, 1981 at the age of 66. His service to the University dated from 1939, when he was appointed Instructor in Economics and Tutor in that department after earning his M.B.A. here the previous spring. Mr. Glover became a full Professor at the Business School in 1954. A native of Brisbane, Australia, he had graduated from Brown University and worked for a time for the U.S. Chamber of Commerce in Washington before coming to Harvard. His expertise lay in the strategic management of corporations, in particular in the context of their environments, and he exhibited a "vigorous, original, and stimulting intellect" in his teaching and writings. He taught such courses as "Administrative Practices," "Business Policy," and "Planning and the Business Environment" in the Business School's M.B.A. and D.B.A. programs, and the Advanced Management Program, which he chaired for three years. His influence extended far beyond this University—his book *The Administrator* (with Ralph M. Hower) has been used widely in business schools for many years. He was co-editor of *The Chief Executive's Handbook* and published *The Revolutionary Corporation: Engines of Plenty, Engines of Growth, Engines of Change* following his retirement. At the Cambridge Research Institute, he continued conceptual and applied research on the strategic guidance of corporations.

Hugh O'Neill Hencken, former Lecturer on Anthropology and Honorary Curator of European Archaeology in the Peabody Museum, died on August 30, 1981 at the age of 79. A specialist in the

Bronze and Iron Ages in the Mediterranean and Continental Europe, he taught for many years at Harvard though his major interest was in research. He was associated with the Peabody Museum from 1930 until his death and was responsible for keeping intact the remarkable Mecklenburg Collection of artifacts from 1,000 Iron Age graves excavated in Central Europe, eventually bringing it to the Peabody. There it has served as a basis for definitive research. Among the many searches Mr. Hencken directed was the Harvard Archaeological Expedition in Ireland (1932-36), which uncovered the headquarters of the Kings of Lagore from the 7th to 10th centuries, and the American School for Prehistoric Research Excavations in Morocco (1947), studying the culture previous to Roman occupation, and in Algeria (1949), exploring a late Paleolithic site. He did extensive work at the Iron Age tombs of the Etruscan city of Tarquinia, publishing two books on the subject in 1968. He chaired the American School of Prehistoric Research, the Peabody's Department of Old World Prehistory, from 1960 until his retirement in 1972. Through a long illness, Mr. Hencken remained devoted to his work and continued writing.

CHARLES ALDERSON JANEWAY, Thomas Morgan Rotch Professor of Pediatrics, *Emeritus*, died on May 28, 1981 at the age of 72. He succeeded Dr. Richard Mason Smith, who also died this year, as Rotch Professor in 1946, following association with the Boston Lying-In and the Peter Bent Brigham Hospitals. An immunologist, he headed the Medical School's Pediatrics Department and, also from 1946 until retirement, was Physician-in-Chief at the Children's Hospital Medical Center in Boston. Dr. Janeway was known especially for his work on the physiology of plasma proteins, infectious diseases, the uses of antibiotics, immunity and hypersensitivity, and immunological deficiency diseases. He earned his degrees at Yale and at Johns Hopkins, where his father, Theodore Janeway, served as physician-in-chief. He came here in 1937 as a Research Fellow, then Instructor, in Bacteriology and Immunology. During World War II, he was largely responsible with Dr. Edwin Cohn for the production of quantities of gamma globulin, stopping rampant hepatitis among Allied troops in Europe. After the war, he advised the World Health Organization, among other agencies, and, in the 1950s, took a year off to visit the Near East and the Far East, offering what service he could to clinics, hospitals, and medical schools. Described as a "compassionate man of total integrity," Dr. Janeway trained hundreds of doctors, serving as a role model for many. At his retirement in 1975, he was asked to serve as Consultant at the School of Public Health. Tragically, he became ill in the last years of his life with a form of leukemia he had studied. The House Staff Association at Children's before his death established an annual award in his name to recognize pediatric clinicians with his outstanding qualities.

RITA MARIE KELLEY, Clinical Professor of Medicine, died on July 22, 1981 at the age of 64. She was an internationally known specialist in the hormonal treatment of cancer. Her contributions to the treatment of malignant diseases were many. In the last three years of her life, she struggled valiantly from the disease she had fought in others, continuing to care for her patients as long as she was able. Dr. Kelley began her long service to the Harvard medical community in 1949 with her appointment as a Research Fellow in Medicine. She served the Massachusetts General Hospital for many years, heading the Medical Oncology Unit from 1973 to 1976. Her election as Clinical Professor came in 1980. A graduate of Boston Teacher's College, she received a master's degree in public health from the Massachusetts Institute of Technology in 1941 and graduated from Columbia University's College of Physicians and Surgeons in 1946. She will be remembered by patients and her colleagues for her compassion and understanding as well as her fine skills as a physician.

LEE BRAND MACHT, Professor of Psychiatry at the Cambridge Hospital, died on April 26, 1981 at the age of 43. A leader in the development of community programs for the mentally ill and the retarded, Dr. Macht chaired the Psychiatric Service at Cambridge Hospital from 1977 and served as director of a network of services in Cambridge and Somerville, Massachusetts. Called "the spokesman of those unable to help themselves," he was a devoted, caring physican whose significant accomplishments in his short career showed his concern for all patients. A graduate of Princeton University and in 1961 of the Medical School, he served at the Massachusetts Mental Health Center following residency, then became a research fellow at the Harvard Laboratory for Community Psychiatry. He worked as deputy medical director and principal psychiatrist for the national Job Corps beginning in 1966, a program of the Office of Economic Opportunity for which he remained a consultant until 1973. In 1975 he served on interim basis for six months as Massachusetts State Commissioner of Mental Health in the Dukakis administration. He was appointed a member of the President's Commission on Mental Health by Jimmy Carter in 1978. That commission's report led to the Mental Health Systems Act of 1980. In recent years he led a coalition of mental health and retardation services in this state that became a statewide advocacy group. He edited and co-authored *Neighborhood Psychiatry*, published in 1977.

HARRY ROWE MIMNO, Professor of Applied Physics, *Emeritus*, died on April 9, 1981 at the age of 80. An expert on radio wave propagation, electronics, and atmospheric physics, Mr. Mimno early on came to be regarded as a visionary for his advocacy in the 1920s of the use of electronics for research and practical application. His early interest in radio took him to Rensselaer Polytechnic Institute, where he established the first college radio station, later designated WHAZ, and set long-distance records for radio communication. After earning a degree there, he taught at the Institute from 1921 to 1929. During that time he received a master's degree from Harvard and so came to our faculty eventually as Instructor in Physics. He became Assistant Professor of Physics and Communication Engineering in 1932, the year he received his Ph.D. here. He was named Gordon McKay Professor in 1946. Shortly after Pearl Harbor he proposed the use of Harvard facilities for military training and with a valued group of faculty at Harvard and MIT led hundreds of U.S. Army and Naval officers through crash courses in radio communications. A naturally gifted teacher who inspired students toward imaginitive applications of what they learned, he conducted basic courses throughout his career. For many years he also edited technical publications for the organization now known as the Institute of Electrical and Electronic Engineers, one of the largest scientific organizations in the country. His devotion to clear language and meaningful research caused that group in 1979 to establish the Harry Rowe Mimno Award, given annually for a scientific paper.

Austin Wakeman Scott, Dane Professor of Law, *Emeritus*, died on April 9, 1981 at the age of 96. One of the great figures of the Law School in this century, he taught literally thousands of students here from 1909, the year he graduated from the School, until 1961, when he retired at age 76. He was one of this country's leading authorities on the law of trusts; his scholarly work on the subject continued until just weeks before his death. *Scott on Trusts*, a five-volume masterpiece first published in 1939, and his casebook, *The Law on Trusts*, are still pre-eminent in their field. In 1956 Mr. Scott earned this University's Ledlie Prize, the highest faculty award, for the second edition of his *Treatise on Trusts*. Though best known for these works, he gained a reputation also as an authority on civil procedures and judicial remedies, in which fields he edited three casebooks and taught several courses. He was born in New Brunswick, New Jersey, the son of Rutgers' president, who taught political science. He earned his bachelor's degree at that college in 1903, and came to Harvard Law to study after teaching mathematics for several years. He became Assistant Professor in 1910, Story Professor in 1919, and Dane Professor in 1938. In 1911-12, the only year he was absent from Harvard, he served as Dean of the College of Law at the State University of Iowa and in 1915-16 he was Acting Dean of Law here. Throughout World War II, with most of the faculty in military or government service, he carried an enormous teaching load, helping to hold a program together for the 60 to 70 students who remained. The late Dean Roscoe Pound, who called him "Mr. Harvard Law School," described Mr. Scott as a born teacher and great scholar and author, "among those whose books have done much to make American law." "Scotty" will always be remembered for his fine sense of humor and the unsurpassed clarity of his lectures.

Richard Mason Smith, Thomas Morgan Rotch Professor of Pediatrics, *Emeritus*, died on February 6, 1981 at the age of 99. A former Physician-in-Chief of Children's Hospital, he was the outstanding pediatrician in the Boston area for decades. He taught at Harvard Medical School for 37 years, from shortly after his graduation there in 1907 until his retirement in 1946. In 1921, when he was Instructor in Pediatrics, President Lowell sought his advice on child health care while planning the new School of Public Health and appointed him the next year to head the Department of Child Hygiene there. Dr. Smith would maintain his appointment at the Medical School as well. At the School of Public Health, he initiated the practice of placing students in local health centers and included maternal and obstetrical care and the social setting of the mother and child among their concerns. Dr. Smith was one of five persons named by Richard Cabot in these same years to coordinate the work of Boston's Health Department with that of private agencies. The group, the Boston Health League, became the Health Division of the United Community Services, of which Richard Smith was chairman for years. His leadership was felt as well through his representation from 1919 to 1946, on the U.S. Children's Bureau, and from 1934 to 1949, on Massachusetts' Public Health Council. He was elected president of the American Academy of Pediatricians in 1940. The author of *The Baby's First Two Years* and *From Infancy to Childhood*, both written for parents, he chaired the Committee on Publications for the Massachusetts Medical Society. In his long lifetime, he saw many of his students move to the forefront of pediatric medicine. He remained active to the end—publishing, giving support for community health projects, and for his alma maters, Mount Hermon School, Williams College, and Harvard Medical School.

ARTHUR SMITHIES, Nathaniel Ropes Professor of Political Economy, *Emeritus*, died on September 9, 1981 at the age of 74. An early Keynesian economist and an authority on fiscal policy, he came to Harvard in 1948 as Professor of Economics, having taught at the University of Michigan, Oxford, and the Australian National University. He had also served the U.S. government in a number of capacities during World War II for the Bureau of the Budget and the Fiscal Analysis Branch of the Economic Cooperation Administration, among others. Later, the goverment bodies he assisted would include the Agency for International Development. He was elected Harvard's Ropes Professor in 1957. A most popular faculty member and teacher, he was an influential chairman of the Economics Department twice in the 1950s and well-loved Master of Kirkland House from 1965 to 1974. He wrote continuously and served as editor for the *Quarterly Journal of Economics* and the *Journal of Economic Abstracts*. His 1948 book, *The Federal Budget and Fiscal Policy*, remained a standard text for 20 years. A colleague said Mr. Smithies believed a sense of history made the difference between a good economist and an inferior one. His own caused him in the latter years of his career to move his major interest from federal fiscal policy to the economic problems of developing countries. A native of Tasmania, he earned degrees from its University and Oxford, and the Ph.D. from Harvard.

JAMES CLARKE WHITE, Professor of Surgery at the Massachusetts General Hospital, *Emeritus*, died on January 7, 1981 at the age of 85. A graduate of the College in 1917 and of the Medical School in 1923, this eminent surgeon was the third doctor in his family to serve the Massachusetts General throughout his distinguished career. His grandfather, also James Clarke White, founded the hospital's Department of Dermatology and his father, Charles James White, was Chief of Dermatology. James White made major contributions in the field of the autonomic nervous system, particularly toward the care of patients with spinal injuries, brain tumors, and terminal cancer. On a trip in the 1920s as a Moseley Travelling Fellow, in which he studied in Strausbourg and Paris and visited the great European clinics, he became interested in the surgical treatment of unmanageable pain. Returning to the Massachusetts General, he undertook further studies and made the decision to enter that specialty. "Nothing could have proved more rewarding," he was to write later. Dr. White was appointed Chief of the Neurosurgical Service at the hospital in 1941. He served in the Navy in both World Wars; shortly after his MGH appointment he was placed in charge of neurosurgery at the Chelsea (New York) Naval Hospital, during a time when numerous techniques in his field were being discovered. Back at the MGH and Harvard, he created a training program in neurosurgery known throughout the world. On the Medical School faculty from 1926, he became a full professor in 1955, and retired in 1961. He remained active in clinical neurosurgery, investigation, and writing.

Derek C. Bok
President

March 1982

A list containing all resignations accepted during the academic year 1980-81 and all promotions, elections to established chairs, and all appointments without limit of time voted during the academic year 1980-81, as well as a list of visiting professors and lecturers, is on deposit in the office of the Secretary of the Corporation and in the Archives.